

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

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**Volume 2: Comparisons across  
disability groups**

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**Findings from the National Longitudinal Transition Study 2012**

**Chapters 1 through 6**

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

It is widely recognized that the 12 percent of all youth in the United States who have disabilities comprise a set of students with distinct capacities and needs. Federal legislation, including the most recent updates to the Individuals with Disabilities Education Act (IDEA) in 2004, identifies different disability groups and mandates that students in each of them have access to a free and appropriate public education. It also authorizes nationwide funding to help school districts provide services to meet their unique needs. A core component of IDEA is the requirement that schools and families work together to develop an individualized educational program (IEP) for each student in special education to guide the provision of educational and related services that they need to progress academically. IDEA 2004 places an increased emphasis on helping youth prepare for postsecondary education, careers, and independent living.

Despite these policies, concern about the challenges youth with different disabilities face and interest in understanding differences in their experiences remains. 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 with their disability group (e.g., Newman et al., 2010; Wagner et al., 1991). Since then, the educational and social 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, 2012; Thapa et al., 2013). The nation is more racially and ethnically diverse, the economy is recovering from the Great Recession, and employers place greater value on postsecondary education (Colby & Ortman, 2015; Oreopoulos & Petronijevic, 2013; Oreopoulos, von Wachter, & Heisz, 2012). These changes may be affecting youth in the disability groups in diverse ways.

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 in the series of NLTS studies. 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, allows direct comparisons of youth with and without an IEP. The study also compares youth with different disabilities, and uses data from the prior NLTS studies to examine trends in their characteristics and experiences over three decades. Three initial report volumes are being 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.

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### **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 will be available on the [Institute of Education Sciences website for the NLTS 2012](#) when published.

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This volume, the second from NLTS 2012, examines the characteristics and experiences of youth in 12 disability groups recognized by IDEA 2004 (see box 2). Not only do education agencies report student data using those categories but efforts to develop and identify effective service approaches also often target specific disabilities.

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**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)**<sup>1</sup> 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.

<sup>1</sup> 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.

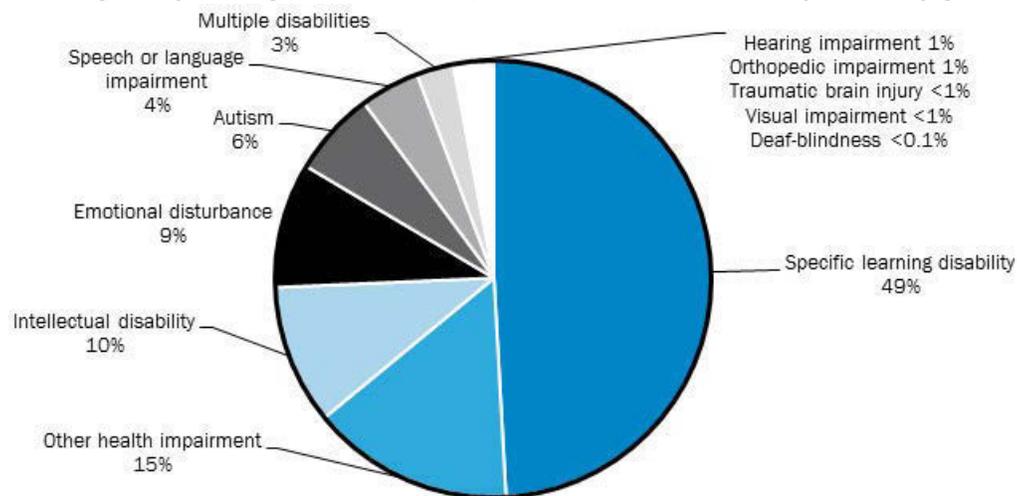
Source: Individuals with Disabilities Education Act, 34 C.F.R. Part 300 § 300.8 (C).

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Youth are assigned to disability categories as part of the process of developing their IEP. This process is designed to include input from them and their parents, their teacher, and a school staff member who is knowledgeable about the needs of students with their disability. Youth in the same disability category can have different needs.

Some disability categories are more common than others (figure 1). Most youth in special education have disabilities that are related to learning, cognition, or behavior. Specific learning disabilities, in particular, account for 49 percent of all youth in special education. As a result, this disability group has the most influence in shaping the characteristics and experiences of youth with an IEP overall. In contrast, several disability groups with physical impairments each include 1 percent or fewer of all youth with an IEP.

**Figure 1. Percentages of youth ages 13 to 21 in special education in 2012, by disability group**



Source: U.S. Department of Education, Office of Special Education Programs, IDEA Data Center.

### Overview of the National Longitudinal Transition Study 2012

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 U.S. in grades 7 through 12 (or secondary ungraded classes). 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<sup>4</sup>, 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 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 (5 percent of the nearly

<sup>4</sup> Because youth with deafness and hearing impairments are small groups, they have been combined into one group for this study.

13,000 youth).<sup>5</sup> 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.<sup>6</sup> It spans multiple ages and grades to provide a broad view of students' school experiences at a point in time. Box 3 provides more information on the NLTS 2012.

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### **Box 3. National Longitudinal Transition Study 2012 at a glance**

#### **Students in the study and how they were selected**

NLTS 2012 provides information on a nationally representative set of students in grades 7 through 12 or who were ages 13 to 21 and attending secondary ungraded classes when selected for the study in December 2011. To represent all secondary school youth with an IEP in the United States for each disability category, the study team first drew a nationally representative sample of 572 school districts, charter schools, and special schools for deaf and/or blind students from a list supplied by the U.S. Department of Education; 432 districts and special schools (76 percent) agreed to participate in the study. The participating districts and schools provided lists of enrolled students with their IEP status and category, from which students within each disability category, students with a 504 plan but no IEP, and students with neither a 504 plan nor an IEP were selected. The study team then attempted to locate and interview a parent of each selected student and, with a parent's consent, the student. Of the 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 youth with an IEP who were enrolled in school and surveyed during 2012 or 2013, including data from 9,549 parent surveys and 8,167 youth surveys. It excludes nearly 1,000 youth with an IEP who were not enrolled in school during the school year in which their parent was surveyed. See [appendix A](#) for more detail on the study.

#### **Collection of information for the study**

Parent and youth surveys were completed during the winter, spring, and summer of 2012 and 2013, when youth were ages 12 to 23, 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 (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. See appendix A for more detail. The U.S. Department of Education plans to collect transcripts and other administrative data in the future.

#### **Analysis and presentation of information collected**

This volume presents comparisons of group averages and tests for statistically significant differences between groups.<sup>1</sup> Because of the large number of comparisons made, the text highlights only the statistically significant differences that are at least 5 percentage points between a disability group and the average for all youth with an IEP.<sup>2</sup> 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 five percentage point level was not empirically derived or based on an external standard. The average for all youth with an IEP provides an important overall comparison of the population for each disability group, although it is heavily influenced by youth with specific learning disabilities (see figure 1). The fact that nearly half of youth with an IEP have a specific learning disability makes it more likely that this group will be similar to the overall average for youth with an IEP than other groups will be. For a small number of measures, the report text uses the terms more and less "at-risk" for poorer post-high school outcomes to refer to statistically significant differences between a disability group and the average for all youth with an IEP that are at least 5 percentage points. The main analyses combine the experiences of multiple ages and grades to provide a broad view of students' school experiences at a point in time. The volume also includes analyses for specific youth age groups.

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<sup>5</sup> Section 504 is a civil rights statute that prohibits excluding 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 defines disabilities in terms of adversely affecting students' educational performance.

<sup>6</sup> 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.

### Limitations of the study

Because low response rates can lead to a bias in results if survey nonrespondents have different characteristics than the respondents, several kinds of analyses were conducted to examine the potential for nonresponse bias in the NLTS 2012 parent and youth surveys (see appendix A for detail). Together, the results from applying these methods suggested 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 similarities and differences between groups; it does not attempt to definitively explain why groups are similar or different.

#### Notes

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 two groups will appear to differ 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.
  2. In a few cases, the report also discusses statistically significant differences that are at least 3 percentage points and in which one group's proportion is at least double (or at most half) the proportion for all youth with an IEP.
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### Key questions of interest and 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 are described.<sup>7</sup> The most important findings pertain to key experiences, supports, and expectations selected by the study team that prior research suggests may be predictors of students' post-high school outcomes (appendix A provides more detail about these predictors referred to in this report as key indicators).

- **Chapter 2: *What are the background characteristics of youth and the schools they attend?*** Because individual, household, and school traits can influence youth experiences and aspirations, it is essential to describe how characteristics such as income, race/ethnicity, age, gender, and school quality differ across youth with different disabilities. Subgroups of youth defined by these characteristics are examined in other chapters to more fully understand the differences among youth with an IEP.
- **Chapter 3: *What challenges do youth face relating to health, functional abilities, and independence?*** Helping youth with an IEP enhance their functional abilities and become more independent is a key objective of transition planning under IDEA 2004, making it important to compare health and functional abilities across the disability groups. In addition, how youth participate in secondary school and plan for the future can depend on their health, communication and physical abilities, independence, and sense of self-control. *Key indicators: general health status and performance on activities of daily living.*
- **Chapter 4: *How engaged are youth in school and with friends?*** Youth who enjoy school, are involved in activities, have friendships, and stay out of trouble are more likely to progress in school and develop socially. Hence, it is important to describe how youth across disability groups differ in their engagement in school and with friends, including the extent to which they experience negative events such as bullying, repeating grades, suspensions or expulsions, or being arrested. *Key indicators: suspensions from school, being teased*

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<sup>7</sup> For example, the report excludes measures on the reasons youth left school because the analyses focus on youth still enrolled in secondary education. It also excludes parent-reported information on youth disabilities and special education receipt because the report uses information provided by the districts instead (although these measures affect skip logic for some measures).

*or called names, participation in school extracurricular activities, and frequency of getting together with friends.*

- **Chapter 5: What academic and special education supports do youth receive?** Students' success hinges in part on whether they receive the academic supports and services they need to address their disabilities. Both schools and families can help address these needs. Recognizing that the needs of youth with an IEP vary, it is important to examine how the supports that they receive from schools and their parents differ across disability groups. *Key indicators: receipt of school-provided academic instruction outside school hours, and whether the youth's parent or another adult in the household provided homework help at least weekly during the school year.*
- **Chapter 6: How are youth preparing 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 useful to examine the aspirations of youth across disability groups, how involved they are in defining their post-high school goals, how they are preparing for postsecondary education and work, and what expectations and challenges their parents perceive for them in adulthood. *Key indicators: youths' input in their IEP and transition planning, whether youth expect to obtain postsecondary education, youths' college entrance or placement test-taking, youths' paid employment, and parents' expectations that youth will live independently.*

More detail on the NLTS 2012 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 and 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; 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.

## **Chapter 2. What are the background characteristics of youth and the schools they attend?**

It has long been known that the characteristics of students, their families, and the schools they attend are related to—though do not necessarily determine—the supports students need and their later success (Fryer & Katz, 2013; Newman, et al., 2011). These characteristics may vary across the disability groups of youth with an individualized education program (IEP) in ways that make transitioning to college, employment, and self-sufficiency more or less difficult, as suggested in previous research (Newman et al., 2011; Wagner, Marder, Levine, et al., 2003; Wagner, Newman, & Javitz, 2014). For example, a decade ago, youth with intellectual disability and emotional disturbance were at least twice as likely as those with autism and other health impairments to live in poverty (Wagner, Marder, Levine, et al., 2003). Since then, the economic and demographic characteristics of students overall have changed. For example, the shares of students who are eligible for free or reduced-price lunches and who are Hispanic have risen (U.S. Department of Education, National Center for Education Statistics, 2014, 2016). Updated information on background characteristics for youth with different disabilities is important given the link between these characteristics and outcomes, the changing demographics of the student population nationally, and the recent economic recession.

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### **Key findings in chapter 2**

- **Youth with intellectual disability and emotional disturbance are the most socioeconomically disadvantaged disability groups and most likely to attend lower-performing schools.** Youth in these two groups are more socioeconomically disadvantaged than youth with an IEP overall based on several parent-reported indicators, including parents' income, education, employment, and marital status. For example, 72 percent of youth with intellectual disability live in low-income households, which is 14 percentage points higher than youth with an IEP, on average. In addition, youth with intellectual disability and emotional disturbance are nearly 10 percentage points less likely to have an employed parent than youth with an IEP overall (80 percent). One-third of students in these groups attend a lower-performing school, compared with 27 percent of all youth with an IEP. In contrast, youth with autism and speech or language impairments are less socioeconomically disadvantaged (for example, 37 and 49 percent live in low-income households) and less likely to attend a lower-performing school (22 and 19 percent) than all youth with an IEP.
  - **Three disability groups have the highest concentrations of students older than 18—youth with deaf-blindness, intellectual disability, and multiple disabilities.** On average, only 5 percent of youth with an IEP are older than 18 and still enrolled in high school, but the proportions are more than three times larger among the three disability groups (16 to 19 percent). The additional time many of these youth need to complete high school might reflect the severity of their disabilities and the additional challenges they face.
  - **Males represent a majority of youth in every disability group, though racial and ethnic backgrounds vary.** More than half of youth in each disability group are male, with the largest proportions among youth with autism (84 percent) and emotional disturbance (75 percent). The shares of youth who are Black range from slightly more than 10 percent among youth with autism and orthopedic impairments to about one-quarter among those with emotional disturbance and intellectual disability. Youth with autism also have the smallest share of Hispanic youth (16 percent), but youth with orthopedic impairments have the largest (29 percent).
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The sources of the key information in this chapter are as follows:

- *Socioeconomic characteristics*: parent survey and administrative data
- *School performance, locale, and type*: parent survey and administrative data
- *Age, gender, race-ethnicity, and English proficiency*: parent survey and administrative data

Detailed tables supporting the findings presented in this chapter are available in [appendix B](#).

### **Youth with intellectual disability and emotional disturbance are the most socioeconomically disadvantaged of all the disability groups, whereas those with autism and speech or language impairments are relatively advantaged**

Socioeconomic status may play a role in students' access to high quality education, progress in school, and, some suggest, whether they are identified as having particular types of disabilities (Oswald, Coutinho, Best, & Nguyen, 2001; Sullivan & Bal, 2013; Wagner et al., 2014). Youth in households with lower resources more commonly than other youth have fewer books in the home and are more likely to move frequently (Duncan & Magnuson, 2005). Research on youth with an IEP a decade ago found that some disability groups included larger shares than others of students from low-income households (Wagner, Marder, Levine, et al., 2003). The link between socioeconomic characteristics and post-high school outcomes for students with disabilities (Wagner, Newman, & Javitz, 2014) highlights the importance of understanding how the socioeconomic backgrounds of the disability groups differ.

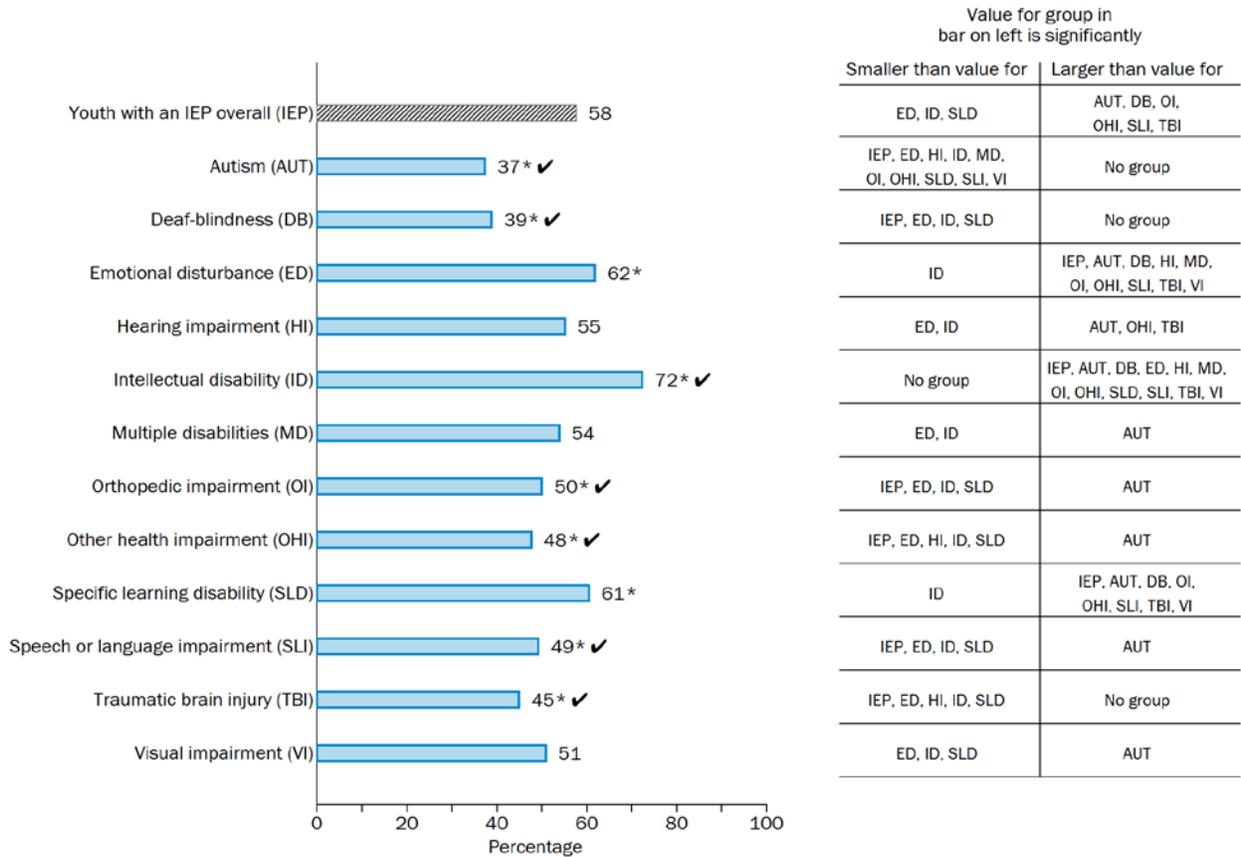
- **Larger proportions of youth with intellectual disability and emotional disturbance live in low-income households and receive federal financial assistance, compared with youth in special education overall** (figure 2 and table 1; see tables B-1 to B-4 for more detail). Seventy-two percent of youth with intellectual disability and 62 percent with emotional disturbance live in low-income households, compared with 58 percent of all youth with an IEP. *Low-income* refers to household income below 185 percent of the federal poverty level—the eligibility standard for schools' free or reduced-price lunch programs.<sup>8</sup> In contrast, 37 to 39 percent of youth with autism and deaf-blindness live in low-income households. Families with lower household incomes are more likely to be eligible for federal nutrition assistance and financial supports. Parents report that 45 percent of youth with intellectual disability and emotional disturbance live in households that received federal food benefits through the Supplemental Nutrition Assistance Program (SNAP) in the past two years, compared with 35 percent of youth with an IEP overall.<sup>9</sup> In contrast, receipt of SNAP is less common among youth with autism (19 percent) and deaf-blindness (14 percent).

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<sup>8</sup> In 2012, this was \$42,643 for a family of four living in the continental United States. The findings about which disability groups tend to have higher and lower household incomes are similar when the income threshold is raised to \$80,000, or roughly twice the free or reduced-price lunch standard for a family of four (table B-2). Specifically, 88 percent of youth with emotional disturbance and 91 percent of youth with intellectual disability live in households with incomes below \$80,000, compared with 81 percent of all youth with an IEP.

<sup>9</sup> Youth with emotional disturbance are also one-and-a-half times as likely as youth with an IEP overall (15 versus 10 percent) to live in households that received Temporary Assistance for Needy Families (TANF), another federal program that targets low-income households, or state welfare during this period (table B-4).

**Figure 2. Percentages of youth living in low-income households, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents were asked to indicate their income and household size 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 \$42,643 for a family of four living in the continental United States in 2012.

*Source:* National Longitudinal Transition Study 2012. The universe is youth who lived with their parents at least some of the time. More information is provided in appendix B, table B-1.

**Table 1. Percentages of youth in households that received benefits through two federal assistance programs for low-income households in the past two years, by disability group**

Disability group	Supplemental Nutrition Assistance Program	Temporary Assistance for Needy Families or state welfare
<b>Youth with an IEP overall</b>	<b>35</b>	<b>10</b>
Autism	19*✓	5*
Deaf-blindness	14*✓	6!
Emotional disturbance	45*✓	15*✓
Hearing impairment	28*✓	9
Intellectual disability	45*✓	14*
Multiple disabilities	31	10
Orthopedic impairment	26*✓	8
Other health impairment	28*✓	9
Specific learning disability	36	9*
Speech or language impairment	27*✓	7*
Traumatic brain injury	25*✓	7*
Visual impairment	28*✓	11

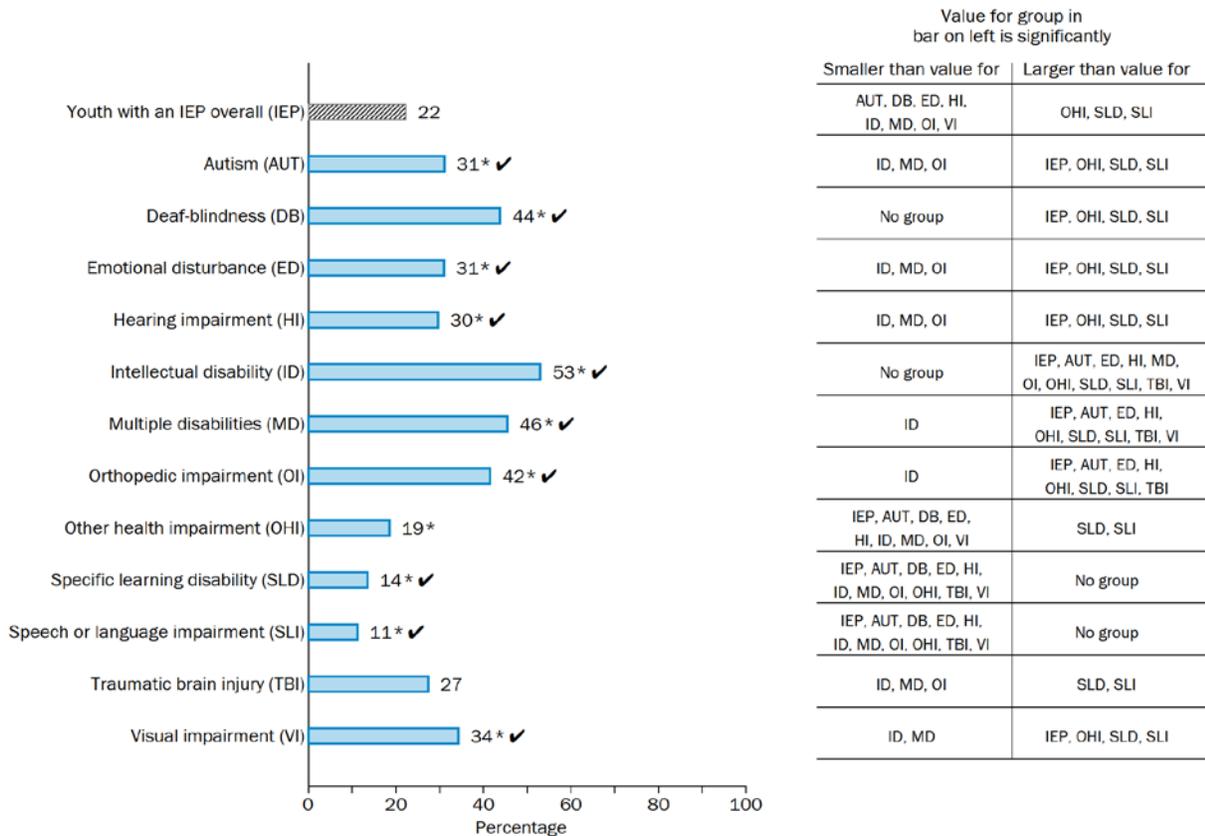
\*= $p < .05$  for comparison with IEP estimate; ✓=comparison is statistically significant and at least 5 percentage points in magnitude; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Parent survey respondents were asked whether anyone in their household received Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families, or state welfare benefits in the past two years.

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

- The disability groups most likely to receive federal disability benefits are not the same as those most likely to receive federal assistance based on low household income alone (figure 3; see table B-5 for more detail). Youth in several groups with below-average SNAP participation rates—including autism, deaf-blindness, hearing impairments, orthopedic impairments, and visual impairments—are more likely than youth with an IEP overall to receive financial aid for themselves<sup>10</sup> through Supplemental Security Income (SSI), according to parents. This reflects the fact that SSI eligibility depends on youths’ disability conditions in addition to their households’ financial needs. Youth with emotional disturbance and intellectual disability have higher SSI participation rates (31 and 53 percent) than youth with an IEP overall (22 percent), consistent with their households’ lower incomes.

**Figure 3. Percentages of youth who received federal disability benefits through the Supplemental Security Income program in the past two years, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

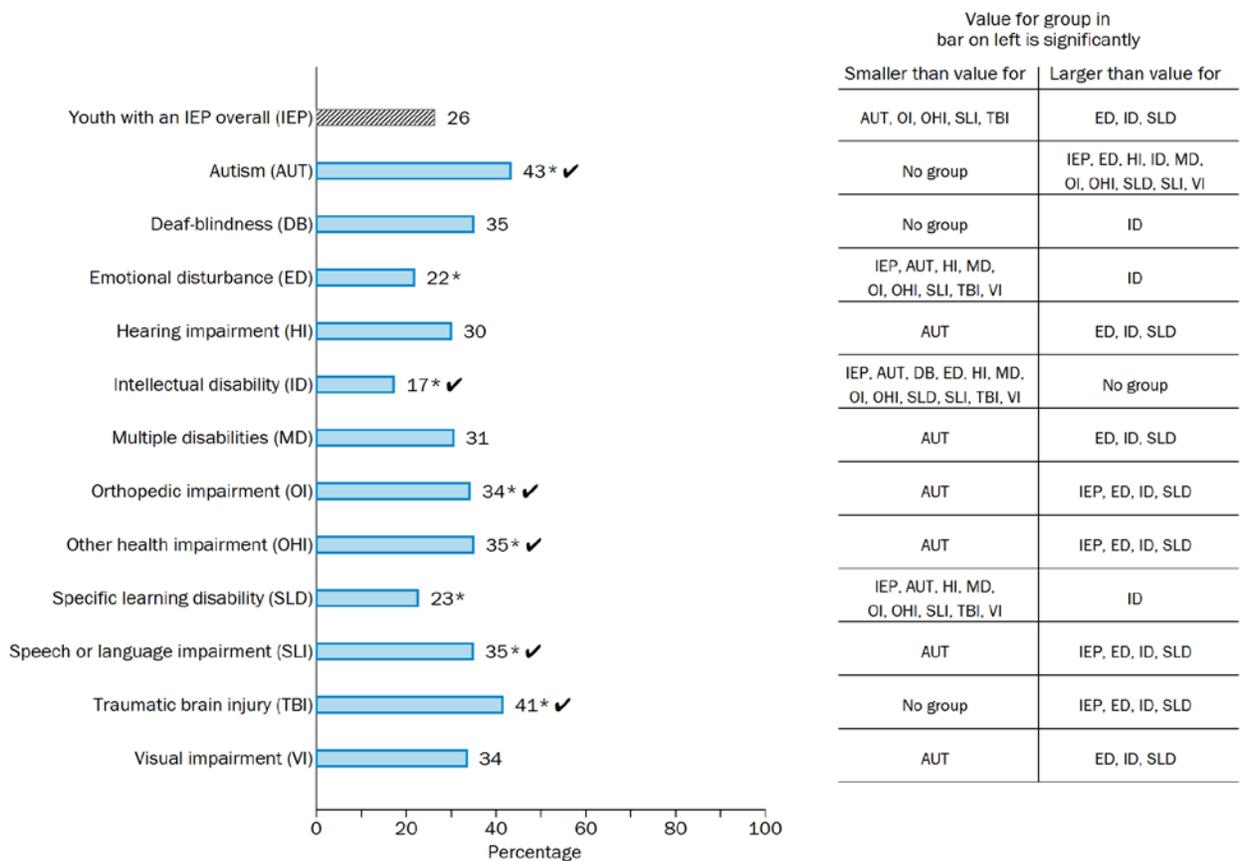
*Note:* Parent survey respondents were asked whether anyone in the household received money for the youth from the Supplemental Security Income program in the past two years.

*Source:* National Longitudinal Transition Study 2012. The universe is youth who lived with their parents at least some of the time. More information is provided in appendix B, table B-5.

<sup>10</sup> Parents were asked about SSI benefits for youth, although adults with disabilities also can be eligible for SSI.

- Having a parent with a four-year college education is least common among youth with intellectual disability, the group most likely to live in low-income households (figure 4; see table B-6 for more detail). Overall, 26 percent of youth with an IEP have a parent (or parent’s spouse) with at least a four-year college degree, but this is the case for only 17 percent of youth with intellectual disability. In contrast, the proportion of youth with a college-educated parent is above average and exceeds one-third in five groups—autism, orthopedic impairments, other health impairments, speech or language impairments, and traumatic brain injuries. These five groups were also less likely than youth with an IEP overall to live in low-income households (see figure 2). Sixteen percent of all youth with an IEP have parents (including the spouse) who did not complete high school or receive a General Educational Development (GED) certificate (table B-7). This is most common for youth with intellectual disability (22 percent) and least common for youth with autism (6 percent).

**Figure 4. Percentages of youth whose parent or parent’s spouse has a four-year college degree or higher, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents, excluding proxies, were asked to indicate the highest year or grade that they and their spouse, if they have one, finished in school.

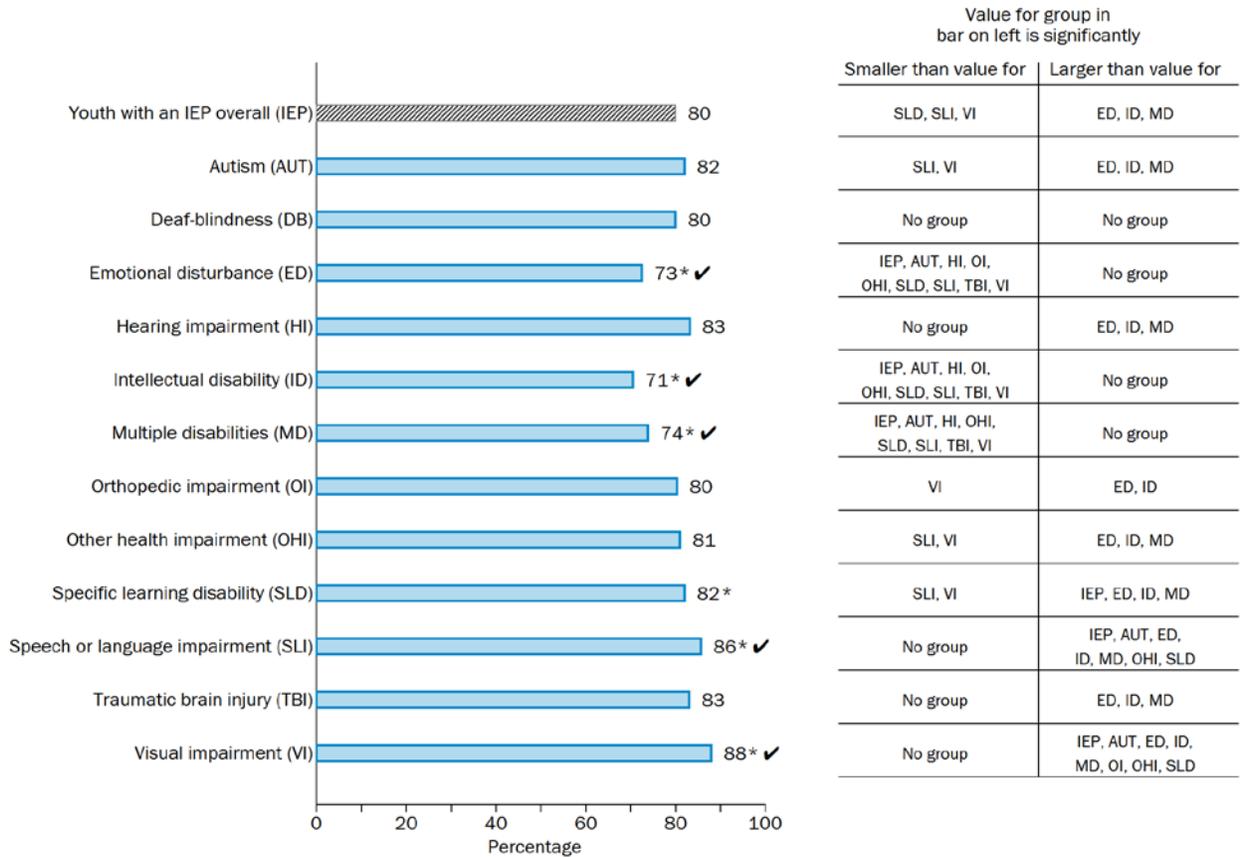
*Source:* National Longitudinal Transition Study 2012. The universe is youth who lived with their parents at least some of the time. More information is provided in appendix B, table B-6.

- **Youth with emotional disturbance, intellectual disability, and multiple disabilities are less likely than youth with an IEP overall to have an employed parent, but not less likely to have health insurance** (figure 5; see table B-8 for more detail). Eighty percent of youth with an IEP have an employed parent, but in those three groups the percentages are 6 to 9 points lower. In contrast, the proportions of youth with speech or language impairments and visual impairments with an employed parent are nearly the same as those of their peers without an IEP (87 percent, see Volume 1 [Lipscomb et al., 2017]). Gaps in parental employment across groups do not translate into gaps in access to health insurance, even though jobs are a common way people in the United States obtain insurance. Between 91 and 97 percent of youth in each disability group have health insurance, although the sources of health coverage differ across the disability groups (table B-9). Private plans are less common in groups where smaller proportions of youth have working parents, such as emotional disturbance and intellectual disability. But across groups, nearly all of those who do not have private coverage obtain it through a government-assisted or public health plan (tables B-10 and B-11).<sup>11</sup>

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<sup>11</sup> The NLTS 2012 data were collected prior to the first open enrollment period in fall 2013 for health insurance through marketplaces established by the Affordable Care Act.

**Figure 5. Percentages of youth whose parent or spouse has a job, by disability group**



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

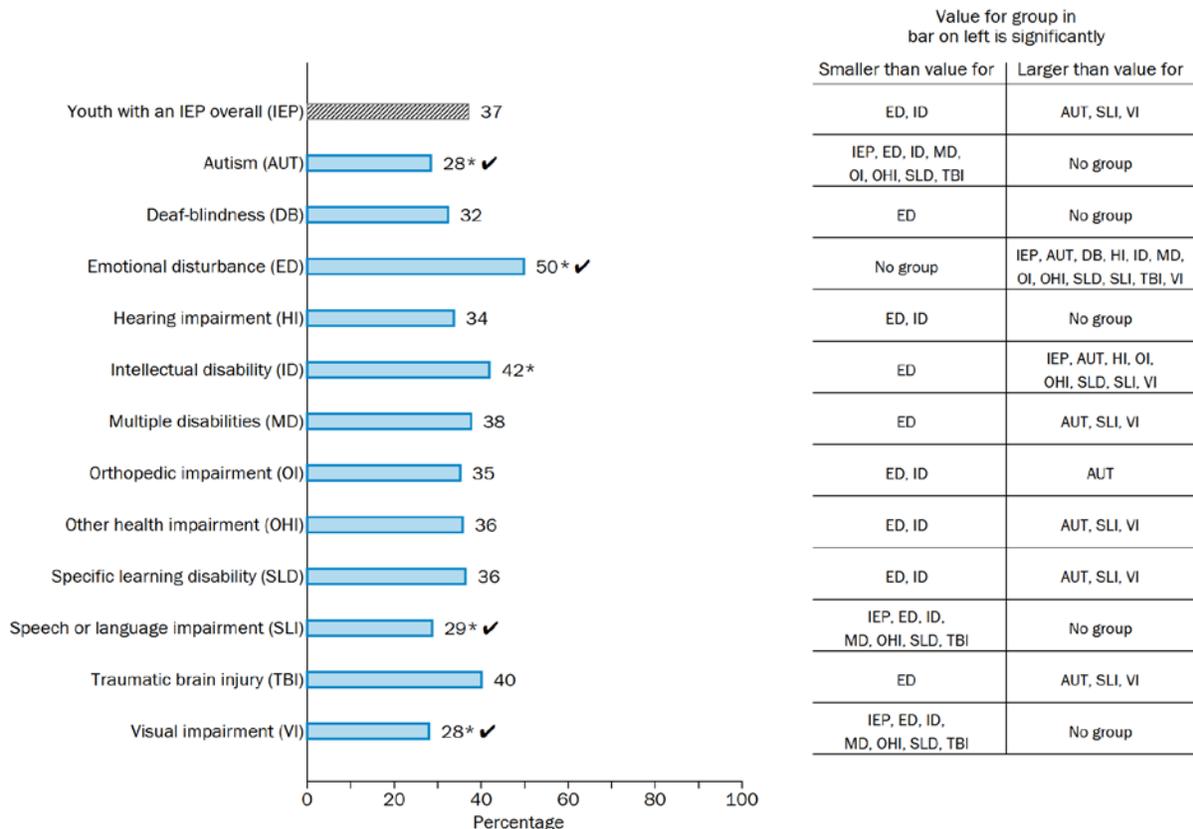
*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*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.

*Source:* National Longitudinal Transition Study 2012. The universe is youth who lived with their parents at least some of the time. More information is provided in appendix B, table B-8.

- **Half of youth with emotional disturbance and one-third in most other disability groups live in single-parent households** (figure 6; see table B-12 for more detail). Fifty percent of youth with emotional disturbance have parents who are neither married nor in a marriage-like relationship.<sup>12</sup> Their households also include fewer adults than those of youth with an IEP overall (2.1 versus 2.4), which translates into fewer potential wage earners (table B-13). In contrast, just 28 to 29 percent of youth with autism, speech or language impairments, and visual impairments live in single-parent households—similar to youth without an IEP (28 percent, see Volume 1).

**Figure 6. Percentages of youth whose parent is not married or in a marriage-like relationship, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group's bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group's bar and the values for the other groups' bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, "ED" will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, "ID" will appear in the right-hand column. If it is not statistically larger than the value for any other group, "No group" will appear in the right-hand column.

*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. The universe is youth who lived with their parents at least some of the time. More information is provided in appendix B, table B-12.

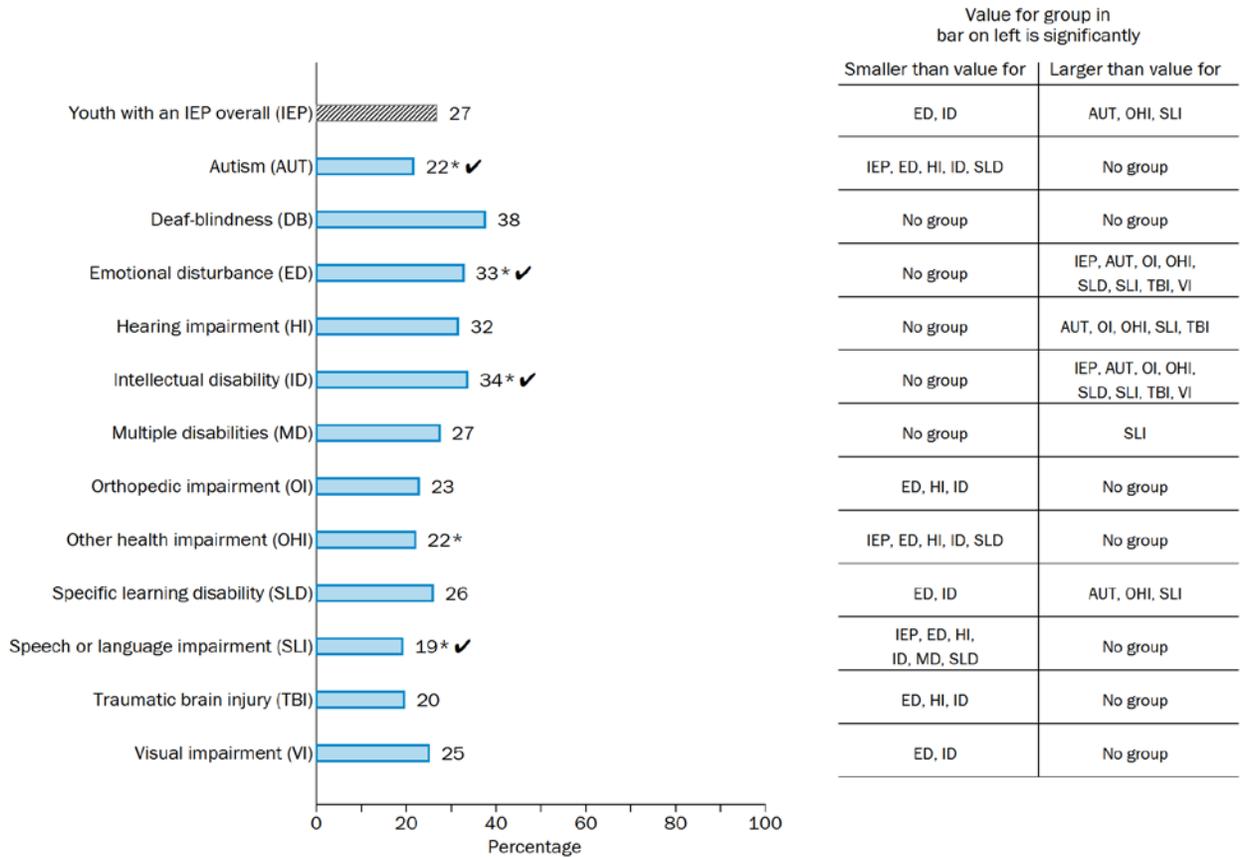
<sup>12</sup> The term *marriage-like relationship* is not defined in either the NLTS 2012 parent survey or the NLTS 2 parent survey from which the item was drawn. For this report, the term has been interpreted as including domestic partnerships. However, parents may have interpreted the term in other ways.

### Youth in the most socioeconomically disadvantaged disability groups are also more likely to attend lower-performing schools

Household resources can affect where youth live and attend school (Fryer & Katz, 2013; Sanbonmatsu, Kling, Duncan, & Brooks-Gunn, 2006). Overall, youth with an IEP, despite being more socioeconomically disadvantaged than their peers, are no more likely to attend a lower-performing school (see Volume 1). (A *lower-performing* school is defined here as having a state-reported math and reading academic proficiency rate in the bottom quarter among the schools in the same state). However, given prior research, having a lower socioeconomic status and attending certain types of schools could put students at a disadvantage (Currie & Thomas, 2012), making it important to understand how the different disability groups are concentrated across schools based on factors such as their performance or urbanicity. In addition, the extent to which youth with an IEP are placed into schools serving only special education students, which in the past was more common for those with deaf-blindness and multiple disabilities than for other groups (Kurth, Morningstar, & Kozleski, 2014), is important given that research points to benefits of inclusion for students' outcomes during and after high school (Mazzotti et al., 2016).

- **The most socioeconomically disadvantaged groups are most likely to attend lower-performing schools, and the least disadvantaged are least likely to do so** (figure 7; see table B-14 for more detail). Overall, 27 percent of youth with an IEP attend a lower-performing school. Attending lower-performing schools is more common for youth with emotional disturbance and intellectual disability (33 and 34 percent) and less common for those with autism and speech or language impairments (22 and 19 percent).

**Figure 7. Percentages of youth who attend a lower-performing school, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Lower-performing schools are schools with an average math and reading proficiency rate in the lowest 25 percent of schools in the same state. Math and reading proficiency rates are standardized within each state, and then averaged within each school.

*Source:* National Longitudinal Transition Study 2012 and EDFacts data. The universe is all youth. More information is provided in appendix B, table B-14.

- **Similar proportions of youth across most of the disability groups attend urban, suburban, and rural schools, respectively** (table 2; see tables B-15 to B-17 for more detail). Overall, 28 percent of youth with an IEP attend school in a city, 34 percent attend school in a suburb, and 38 percent attend school in a town or rural area. These proportions are roughly the same across most disability groups, although youth with autism and speech or language impairments are exceptions. In these two groups, youth are more likely to attend suburban schools (39 and 47 percent) and less likely to attend town or rural schools (33 and 32 percent).

**Table 2. Percentages of youth attending school in a city, suburb, or town or rural area, by disability group**

Disability group	City	Suburb	Town or rural area
<b>Youth with an IEP overall</b>	<b>28</b>	<b>34</b>	<b>38</b>
Autism	28	39*✓	33*✓
Deaf-blindness	33	37!	31!
Emotional disturbance	29	34	37
Hearing impairment	39*✓	31	30*✓
Intellectual disability	31	27*✓	42
Multiple disabilities	21	40	39
Orthopedic impairment	31	33	36
Other health impairment	25*	37	38
Specific learning disability	28	33	39
Speech or language impairment	22*✓	47*✓	32*✓
Traumatic brain injury	26	43	31
Visual impairment	32	32	36

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

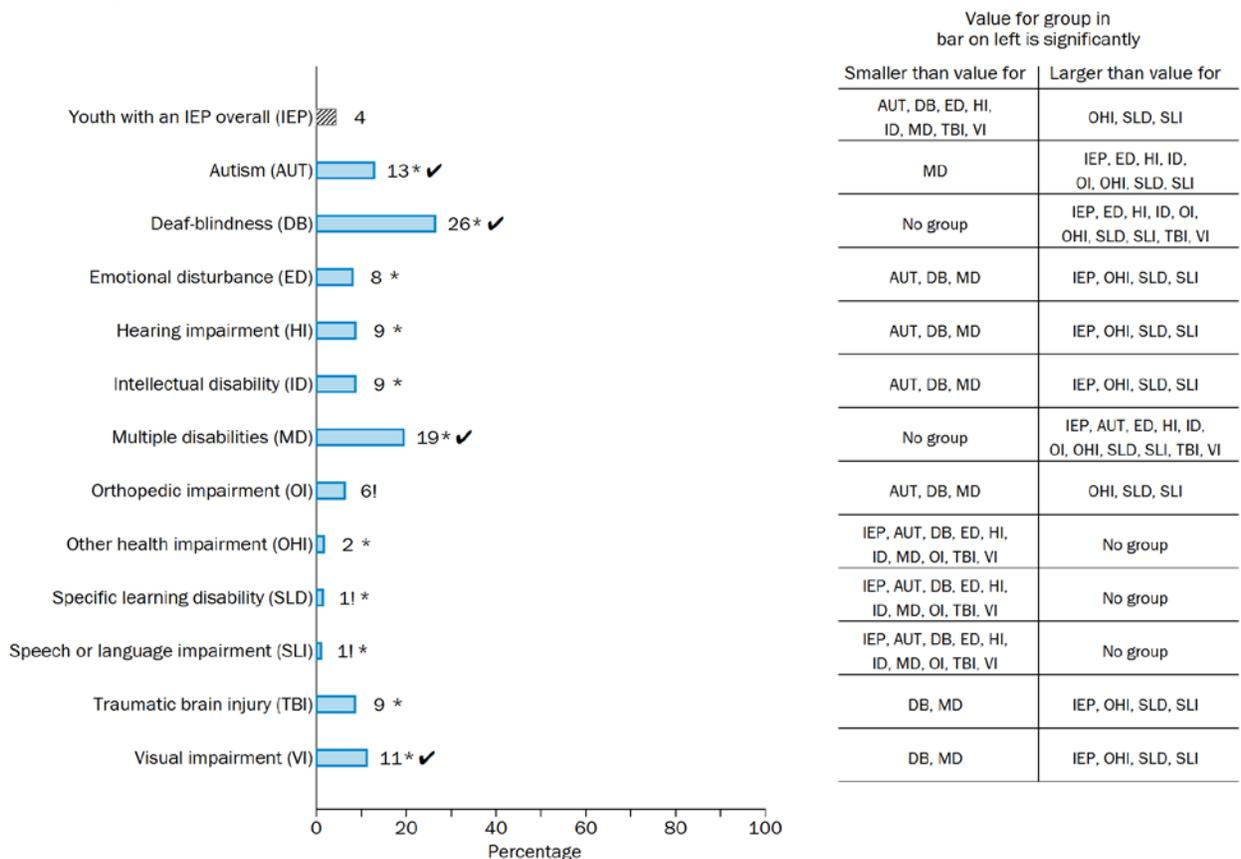
Note: City, suburb, and town or rural area refer to the school address's proximity to an urbanized area.

Source: National Longitudinal Transition Study 2012 and Common Core of Data. The universe is all youth. More information is provided in appendix B, tables B-15 to B-17.

- **Nearly all youth in each disability group attend schools that include non-special education students, but in four groups more than 1 in 10 youth attend schools for special education students only** (figure 8; see table B-18 for more detail). Overall, parents report that 4 percent of youth with an IEP attend schools that serve only youth in special education. These schools are designed for youth whose educational needs are significant or specialized enough that they cannot be met in the regular educational environment. In four groups—autism, deaf-blindness, multiple disabilities, and visual impairments—the proportions attending these types of schools (11 to 26 percent) are about three to six times higher than among youth with an IEP overall.<sup>13</sup> The vast majority of youth with an IEP (96 percent) attend either their local public school or one of several other types of educational settings, such as a magnet school, a vocational/technical school, a charter school, an alternative school, homeschooling, a health facility, or a correctional facility.

<sup>13</sup> In addition, half of youth with multiple disabilities attend a school in which the share of youth in special education is in the top quarter nationwide (that is, above the 75th percentile), the most of any disability group and more than youth with an IEP overall (34 percent) (table B-19).

**Figure 8. Percentages of youth who attend a school that serves only students with disabilities, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents were asked to describe the school that youth attended that year. Responses options were: a regular school that serves a variety of students, a school that serves only students with disabilities, a magnet school, a vocational/technical school, a charter school, an alternative school, home instruction by a professional, homeschooling by a parent, a medical facility, a convalescent hospital, an institution for people with disabilities, a mental health facility, a correctional or juvenile justice facility, or other.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix B, table B-18.

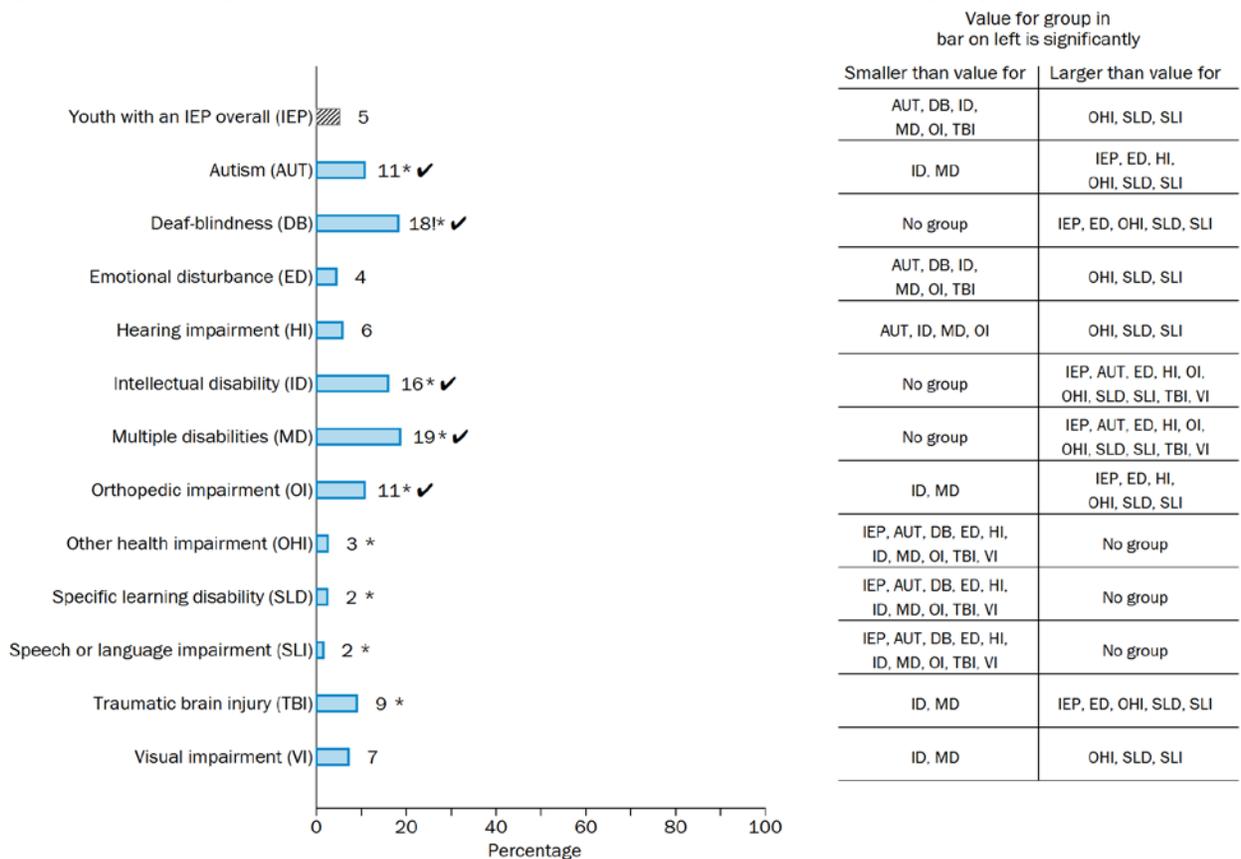
### Three disability groups have the highest concentrations of students older than 18—youth with deaf-blindness, intellectual disability, and multiple disabilities

IDEA 2004 permits youth in special education who are unable to complete high school with their same-age peers to remain in school and to continue receiving special education and related services through the year in which they turn 21. These youth older than 18, who may be more common in some disability groups than in others, are high-risk and a focus of policy because many face more extensive challenges due to their disabilities (see

chapter 3). The factors that have led these groups to remain in high school could also make their post-school transitions more difficult.

Indeed, youth with deaf-blindness, intellectual disability, and multiple disabilities—groups previous research has referred to as having severe disabilities (Carter, Austin, & Trainor, 2012; Kurth et al., 2014)—are three times more likely to remain enrolled after 18. Specifically, between 16 and 19 percent of youth with deaf-blindness, intellectual disability, and multiple disabilities are older than 18, compared with 5 percent of all youth with an IEP (figure 9; see tables B-20 to B-22 for more detail). In two other groups—youth with autism and orthopedic impairments—11 percent are older than 18. In contrast, just 2 percent of youth with specific learning disabilities and speech or language impairments are older than 18.

**Figure 9. Percentages of youth who are older than 18 years old, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents were asked to indicate youth’s date of birth. Sample information was used if parent-reported data were not available.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix B, table B-22.

### **Males represent a majority of youth in every disability group through racial ethnic backgrounds vary**

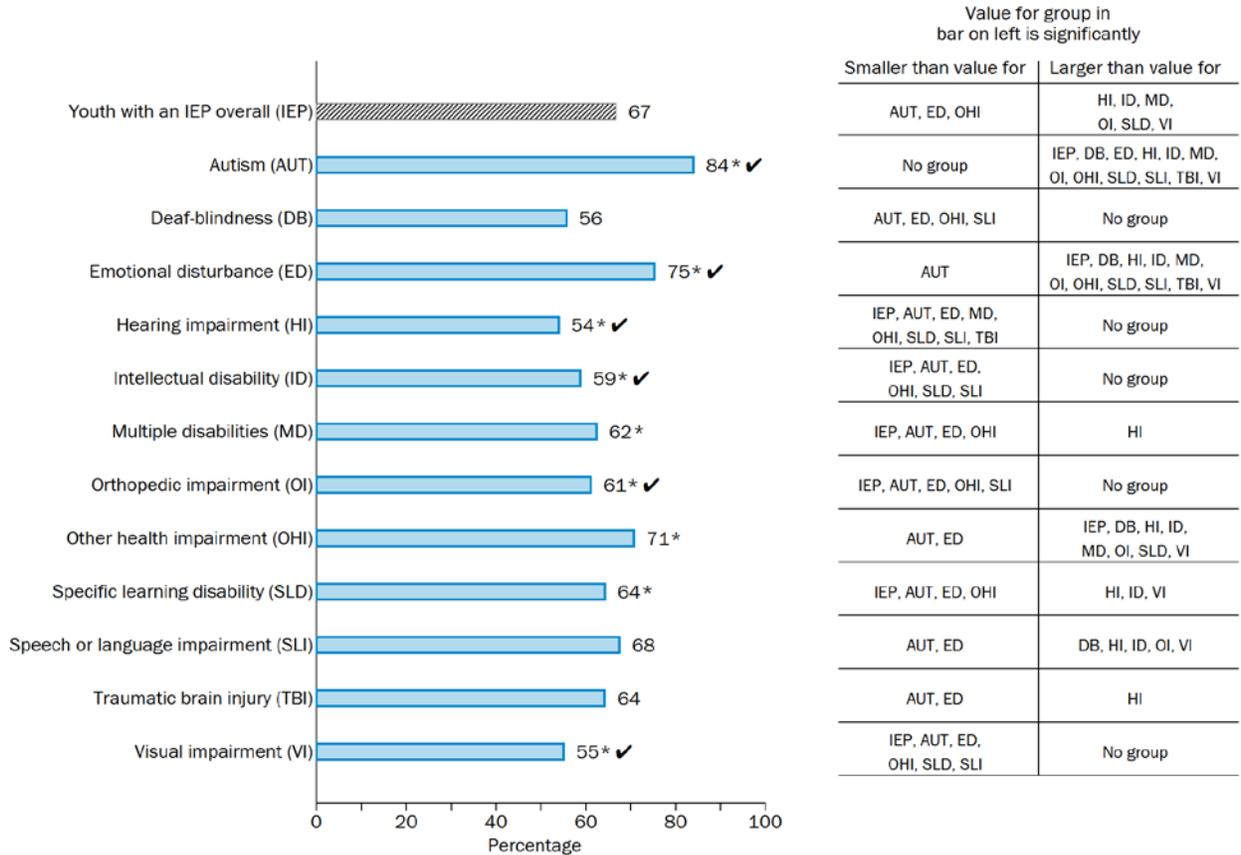
Understanding the demographic characteristics of youth with different disabilities is important given differences in post-high school success and special education participation by gender and race-ethnicity. Research comparing youth who left high school in the 1980s to those in the 2000s suggests that, among youth overall and those with an IEP, rates of college enrollment and employment after high school increased more for girls than for boys, while students who are Black continued to be less likely than those who are White to achieve these outcomes (Aud, Fox, & KewalRamani, 2010; Freeman, 2004; Newman et al., 2010).<sup>14</sup> Earlier data on who has an IEP has generated debate about whether students of different genders and racial-ethnic backgrounds are being identified appropriately for special education both overall and in particular disability groups (Kirkovski, Enticott, & Fitzgerald, 2013; Harry & Klingner, 2014). IDEA 2004 addresses one aspect of these participation and attainment gaps by requiring that states monitor and annually report on the percentage of their districts that they determine to have disproportionate representation of racial and ethnic groups in each disability category due to inappropriate identification.

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<sup>14</sup> The findings for youth with an IEP are based on a measure of engagement in either postsecondary education or employment after leaving high school (Newman et al., 2010). The findings for youth overall are based on separate measures of college enrollment and post-high school employment (Freeman, 2004).

- **Males comprise a majority of each disability group, with the largest proportions among youth with autism and emotional disturbance** (figure 10; see table B-23 for more detail). Youth in special education are predominantly male (see Volume 1). The share of males is largest among youth with autism (84 percent) and emotional disturbance (75 percent) and smallest among youth with hearing impairments (54 percent). The finding that youth with autism are mostly male has been confirmed in other recent studies (Fombonne, 2009; Kirkovski, Enticott, & Fitzgerald, 2013).

**Figure 10. Percentages of youth who are male, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents were asked to confirm or correct school district information about youth’s gender. Sample information was used if parent-reported data were not available.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix B, table B-23.

- Youth with emotional disturbance and intellectual disability, the disability groups that are most socioeconomically disadvantaged, are more likely than youth with an IEP overall to be Black (table 3; see tables B-24 to B-26 for more detail). In particular, 25 percent of youth with emotional disturbance and 27 percent of youth with intellectual disability are Black, compared with 19 percent of youth with an IEP overall. The proportions of youth in these two groups who are Hispanic (18 and 21 percent) are not larger than those among all youth with an IEP (24 percent); instead, youth with orthopedic impairments include proportionately the most Hispanics (29 percent). Youth with autism include the smallest share of students who are Black (12 percent) or who are Hispanic (16 percent).

**Table 3. Percentages of youth who are Black, Hispanic, or another race or ethnicity, by disability group**

Disability group	Black (not Hispanic)	Hispanic	White, Asian, or other race (not Hispanic)
<b>Youth with an IEP overall</b>	<b>19</b>	<b>24</b>	<b>57</b>
Autism	12*✓	16*✓	71*✓
Deaf-blindness	18	23!	59
Emotional disturbance	25*✓	18*✓	58
Hearing impairment	14*✓	28	59
Intellectual disability	27*✓	21	52*
Multiple disabilities	17	19	63
Orthopedic impairment	11*✓	29*✓	60
Other health impairment	17	17*✓	65*✓
Specific learning disability	19	27*	54*
Speech or language impairment	14*✓	26	60
Traumatic brain injury	15	17	68*✓
Visual impairment	14	26	60

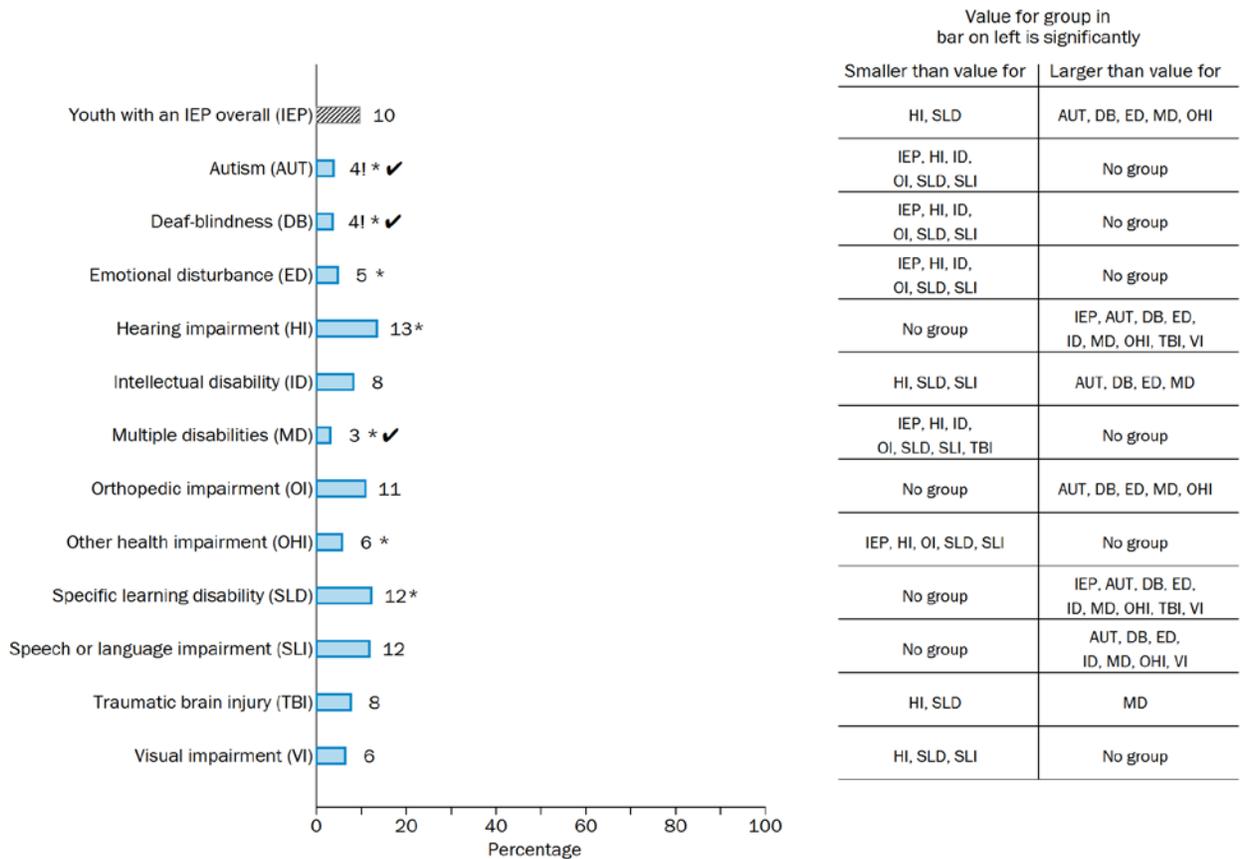
\*= $p < .05$  for comparison with IEP estimate; ✓=comparison is statistically significant and at least 5 percentage points in magnitude; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate youth's race and ethnicity. Sample information from the district at the time of sampling was used when parent-reported data was not available. Black includes African American. Hispanic includes Latino. Other race includes American Indian or Alaska Native, and Native Hawaiian or other Pacific Islander.

Source: National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix B, tables B-24 to B-26.

- Some of the groups with smaller shares of Hispanic students, such as youth with autism and emotional disturbance, also include relatively few youth designated by their districts as limited English proficient (figure 11; see table B-27 for more detail).<sup>15</sup> Overall, 10 percent of youth with an IEP are limited English proficient, according to their school districts. The proportions are about half as large among those with autism, deaf-blindness, emotional disturbance, and multiple disabilities.

**Figure 11. Percentages of youth who are limited English proficient, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* This administrative measure from the district at the time of sampling indicates whether or not youth are limited English proficient.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix B, table B-27.

<sup>15</sup> The U.S. Department of Education’s Office of Elementary and Secondary Education refers to these students as *English learners*, although this report retains the term *limited English proficiency*, which is used in federal law.

### **Chapter 3. What challenges do youth face relating to health, functional abilities, and independence?**

Students' health and other capacities can be important factors in their development and transitions after high school (Carter et al., 2012; Currie, Stabile, Manivong, & Roos, 2010; Wagner, Newman, Cameto, & Levine, 2005). Recognizing this, an update in 2004 to the Individuals with Disabilities Education Act (IDEA) requires that individualized education programs (IEPs) take into account students' functional (not just academic) performance. Functional performance generally refers to abilities to perform activities relevant to everyday life.

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#### **Key findings in chapter 3**

- **Most youth in every group are healthy, but those with intellectual disability, multiple disabilities, and orthopedic impairments are most likely to have poor health and chronic conditions.** At least 40 percent of youth in these groups do not have very good or excellent general health according to parents, compared with 30 percent of youth with an IEP overall. Parents also report that youth in these same three groups, along with five others, are more likely than average to have chronic physical and mental health conditions (37 to 53 percent versus 28 percent). Parents indicate that prescription behavioral medicines are used most by youth with autism, emotional disturbance, and other health impairments (43 to 51 percent versus 27 percent for youth with an IEP overall). Youth with specific learning disabilities and speech or language impairments are less likely than average to have chronic health conditions (17 percent each) and to use behavioral medicine (16 and 12 percent).
  - **Youth with autism, deaf-blindness, intellectual disability, and multiple disabilities most commonly have trouble with communication and understanding.** Parents indicate that at least half of youth in these groups have trouble communicating and at least 60 percent have trouble understanding others, compared with 29 and 44 percent of youth with an IEP overall. Youth with visual impairments are the least likely to have trouble with communicating and understanding others (13 and 20 percent, respectively).
  - **Youth in four groups who are more likely to have poorer general health or difficulty communicating are also less prepared to function independently.** Based on parents' assessments of their children, youth with autism, intellectual disability, multiple disabilities, and orthopedic impairments are more likely than youth with an IEP overall to have difficulty performing various activities of daily living, such as getting to places outside the home. Youth with autism and intellectual disability also are less likely to report undertaking activities that demonstrate their autonomy, such as choosing what to do with friends (45 and 48 percent versus 56 percent for all youth with an IEP). Moreover, youth with autism report a weaker sense of self-direction: for example, three-quarters indicate knowing how to make friends, compared with about 9 in 10 youth with an IEP on average.
  - **Within half the disability groups, the oldest students and those with lower functional abilities face greater issues with health and activities of daily living.** Youth who are older than 18 are more likely than younger youth to have these challenges in six groups—autism, emotional disturbance, hearing impairments, multiple disabilities, orthopedic impairments, and speech or language impairments. The differences based on functional abilities exist in nearly all groups.
-

Research conducted over a decade ago found that, among youth with an IEP, functional performance varied across disability groups and tended to be lower for youth with autism, intellectual disability, multiple disabilities, and orthopedic impairments (Wagner, Marder, Levine, et al., 2003). IDEA 2004's attention to functional performance may be particularly beneficial for youth in these groups, as prior research suggests that indicators of functional performance such as the ability to communicate, understand others, and get to places outside the home are predictive of employment outcomes in young adult life for youth with severe disabilities (Carter et al., 2012).

Under IDEA 2004, IEPs must include a set of postsecondary goals that reflect not only students' preferences and interests, but also their strengths. These requirements reflect the concept of self-determination. Self-determination pertains broadly to youths' beliefs that they can control and improve the quality of their own lives. Disability experts have shown that self-determination, which combines the ability to act independently with a sense of self-direction, is important for youth development and students' post-high school outcomes (Berry, Ward, & Caplan, 2012; Shogren & Shaw, 2016; Zheng, Erickson, Kingston, & Noonan, 2014).

The sources of the key information in this chapter are as follows:

- *Health conditions and use of behavioral medicines*: parent survey
- *Communication, sensory, and motor abilities*: parent survey
- *Activities indicative of living independently*: parent and youth surveys
- *Activities demonstrating autonomy and perceptions of self-direction*: youth survey
- *Subgroup differences in health and performance on activities of daily living*: parent survey

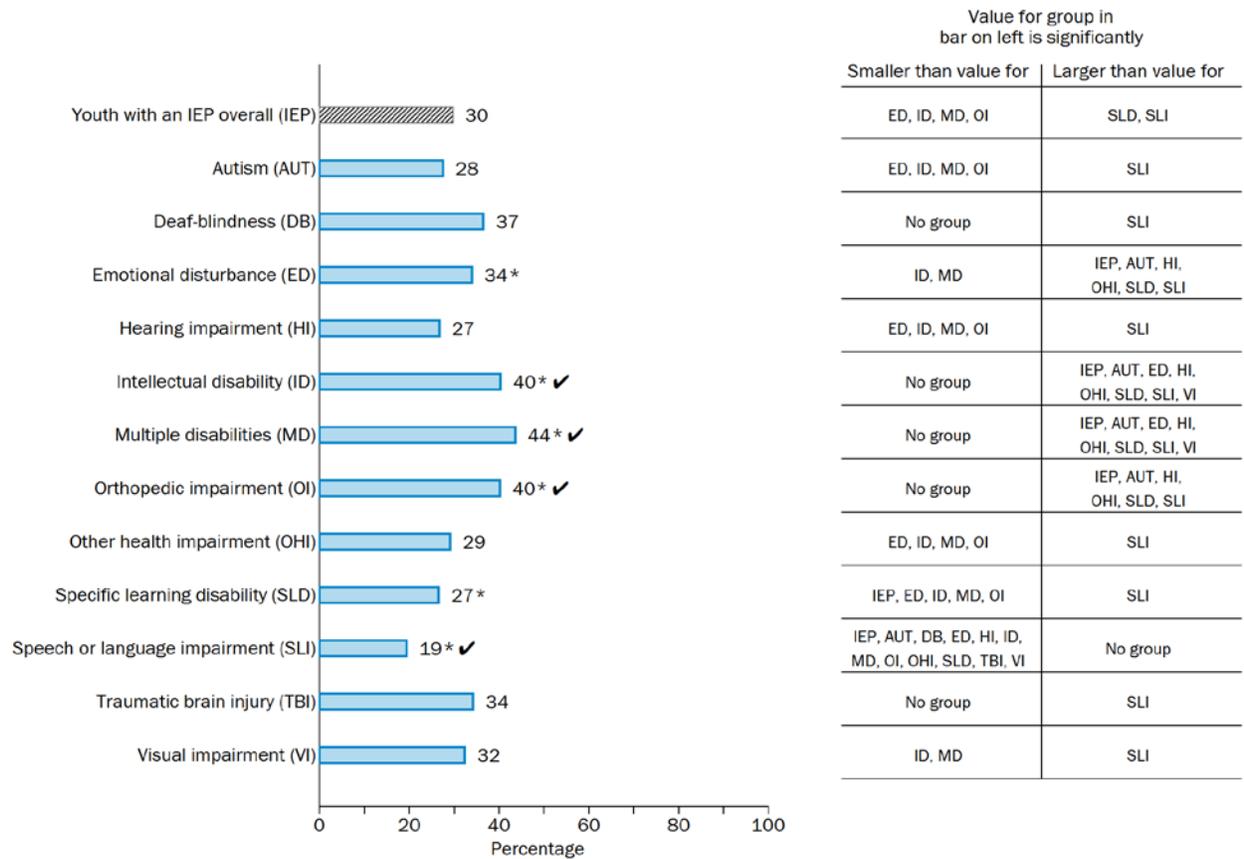
Detailed tables supporting the findings presented in this chapter are available in [appendix C](#).

### **Most youth in every group are healthy, but those with intellectual disability, multiple disabilities, and orthopedic impairments are most likely to have poor health and chronic conditions**

Health and medical conditions can undermine academic progress and post-high school transitions in a variety of ways. When these conditions become chronic, they can have serious implications for youth that can include extended school absences and fewer chances to develop social relationships (Forrest, Bevans, Riley, Crespo, & Louis, 2011). Health status is an important predictor of success in college and the labor market (Currie et al., 2010; Smith, 2009). In addition, policymakers and educators have been interested in the growing use of prescription behavioral medicines—typically among those with emotional, behavioral, and attention deficit disorders—and what happens when youth either do not take or rely excessively on them (Mattison, Rundberg-Rivera, & Michel, 2014; Setlick, Bond, & Ho, 2009; Wilens et al., 2008). On average, youth with an IEP are more likely than their peers to have poorer health, chronic conditions, and behavioral issues that need to be controlled medically (see Volume 1), although the disability groups may differ in the specific conditions they are more likely to face.

- Most youth in each disability group have very good or excellent health, but youth with intellectual disability, multiple disabilities, and orthopedic impairments have worse health on average (figure 12; see table C-1 for more detail). Overall, parents of 30 percent of youth with an IEP describe their children’s general health as poor, fair, or good, rather than very good or excellent. However, this is at least 10 percentage points more common among youth with intellectual disability, multiple disabilities, and orthopedic impairments (40 to 44 percentage points). In contrast, 19 percent of youth with speech or language impairments do not have very good or excellent general health, closer to the average proportion found among youth without an IEP (14 percent, see Volume 1).

**Figure 12. Percentages of youth who do not have very good or excellent general health, by disability group**



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

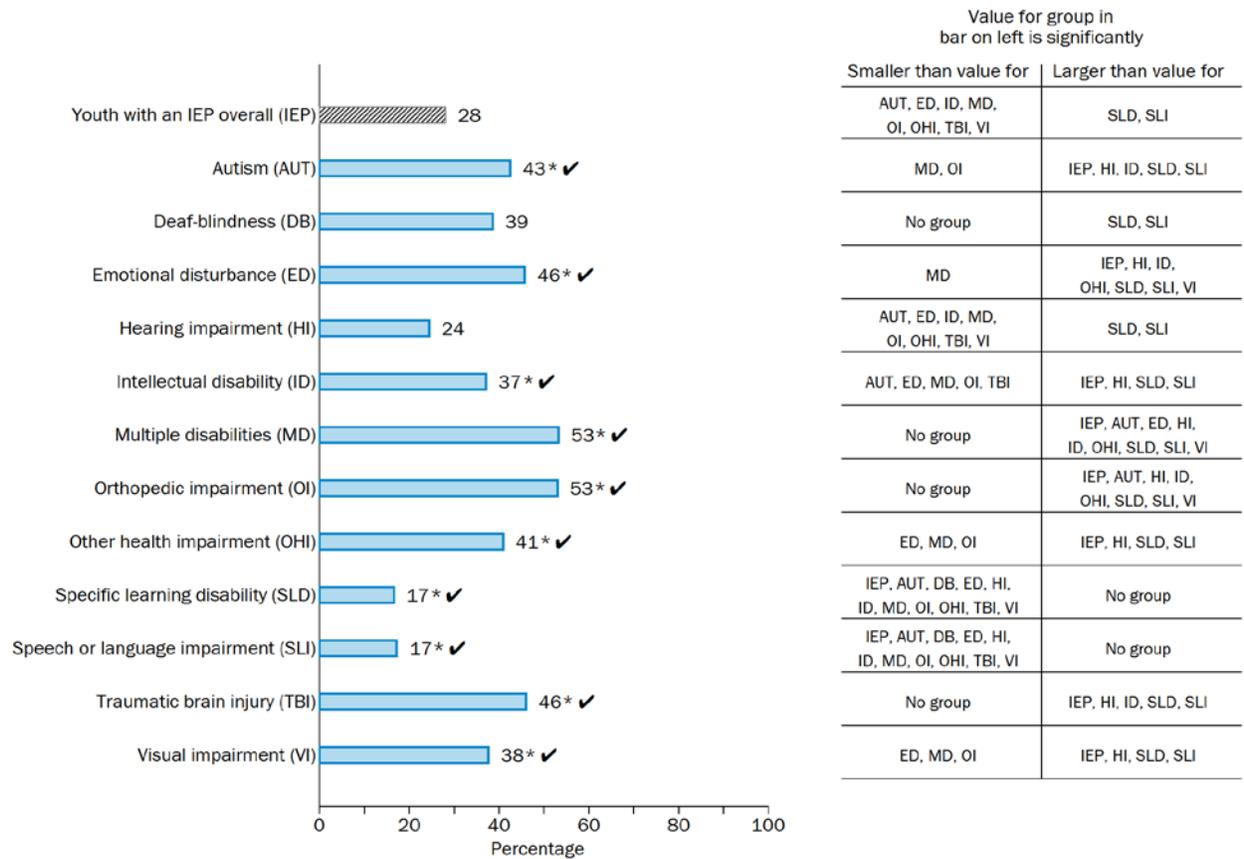
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*Note:* Parent survey respondents were asked to rate youth’s general health as excellent, very good, good, fair, or poor.

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

- The prevalence of chronic health conditions varies greatly across disability groups, and is up to three times greater in some groups than in others (figure 13; see table C-2 for more detail). Overall, 28 percent of youth with an IEP have a chronic physical or mental health condition that requires regular treatment or medical care according to parents. However, eight disability groups have larger proportions, including the same three with worse general health—youth with intellectual disability, multiple disabilities, and orthopedic impairments (see figure 12). Most notably, 53 percent of youth with multiple disabilities and orthopedic impairments have a chronic condition, three times more than among youth with specific learning disabilities and speech or language impairments (17 percent for both groups).

**Figure 13. Percentages of youth who have a chronic physical or mental health condition, by disability group**



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

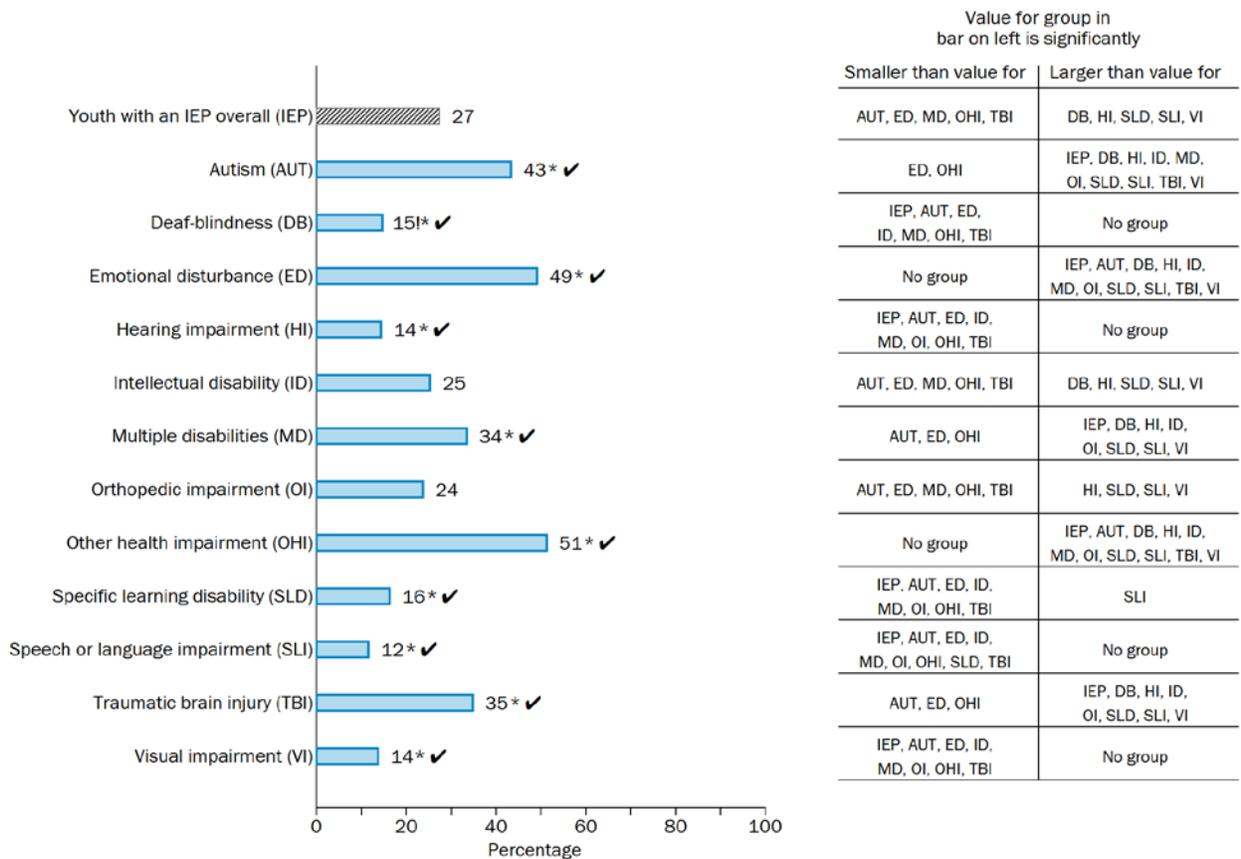
*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents were asked whether youth have a chronic physical or mental health condition requiring regular treatment or medical care.

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

- Use of prescription behavioral medicines also varies, and is particularly common among youth with autism, emotional disturbance, and other health impairments (figure 14; see table C-3 for more detail). Parents indicate that more than one quarter (27 percent) of all youth with an IEP use prescription medicine to control their attention, behavior, activity level, or changes in mood. The groups most likely to use these medicines are youth with autism (43 percent), emotional disturbance (49 percent), and other health impairments (51 percent). In contrast, at most 16 percent of youth in five other groups use prescription behavioral medicine—deaf-blindness, hearing impairments, specific learning disabilities, speech or language impairments, and visual impairments.

**Figure 14. Percentages of youth who use prescription behavioral medicine, by disability group**



Value for group in bar on left is significantly	
Smaller than value for	Larger than value for
AUT, ED, MD, OHI, TBI	DB, HI, SLD, SLI, VI
ED, OHI	IEP, DB, HI, ID, MD, OI, SLD, SLI, TBI, VI
IEP, AUT, ED, ID, MD, OHI, TBI	No group
No group	IEP, AUT, DB, HI, ID, MD, OI, SLD, SLI, TBI, VI
IEP, AUT, ED, ID, MD, OI, OHI, TBI	No group
AUT, ED, MD, OHI, TBI	DB, HI, SLD, SLI, VI
AUT, ED, OHI	IEP, DB, HI, ID, OI, SLD, SLI, VI
AUT, ED, MD, OHI, TBI	HI, SLD, SLI, VI
No group	IEP, AUT, DB, HI, ID, MD, OI, SLD, SLI, TBI, VI
IEP, AUT, ED, ID, MD, OI, OHI, TBI	SLI
IEP, AUT, ED, ID, MD, OI, OHI, SLD, TBI	No group
AUT, ED, OHI	IEP, DB, HI, ID, OI, SLD, SLI, VI
IEP, AUT, ED, ID, MD, OI, OHI, TBI	No group

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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*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.

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

**Communication challenges affect a majority of youth in half of the disability groups, while limitations with sensory and motor abilities are concentrated among a smaller number of groups**

Functional limitations can have a profound impact on youths' ability to engage in educational activities and obtain employment (Wagner et al., 2005). These difficulties can span a range of communication, sensory, and motor abilities. For instance, research on youth with severe disabilities from the past decade found that the abilities to communicate and understand others were related to their likelihood of obtaining jobs after high school (Carter et al., 2012).<sup>16</sup> Functional limitations are considerably more common among youth with an IEP than their peers (see Volume 1). For example, 29 percent of youth with an IEP overall have trouble communicating through any means according to their parents, compared with only 4 percent of their peers. In addition, 44 percent have trouble understanding others, more than five times the proportion of their peers who do (8 percent).

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<sup>16</sup> The correlation between these measures and post-high school employment was statistically significant only when other measures such as paid work experience in high school were not also included in the analysis.

- **At least half of youth with autism, deaf-blindness, intellectual disability, and multiple disabilities have difficulty both with communicating and understanding others** (table 4; see tables C-4 and C-5 for more detail). Between 50 and 75 percent of youth in the four groups noted above have trouble communicating through any means according to their parents, including sign language, manual communication, lip reading, cued speech, oral speech, and a communication board or book. In addition, between 53 and 84 percent of youth in these same four groups plus youth with hearing impairments and traumatic brain injuries have trouble understanding others. The ability to understand others relates to communication, but understanding involves making cognitive connections to absorb what other people say. Youth with visual impairments are the least likely to have trouble communicating and understanding others (13 and 20 percent). The disability groups also vary considerably in terms of difficulty speaking clearly and carrying on an oral conversation, with larger and smaller proportions in the same groups (tables C-6 and C-7).

**Table 4. Percentages of youth who have trouble communicating and understanding what other people say to them, by disability group**

Disability group	Trouble communicating by any means	Trouble understanding what other people say to him or her
<b>Youth with an IEP overall</b>	<b>29</b>	<b>44</b>
Autism	50*✓	70*✓
Deaf-blindness	75*✓	84*✓
Emotional disturbance	17*✓	41
Hearing impairment	44*✓	70*✓
Intellectual disability	60*✓	69*✓
Multiple disabilities	62*✓	61*✓
Orthopedic impairment	41*✓	33*✓
Other health impairment	21*✓	46
Specific learning disability	20*✓	35*✓
Speech or language impairment	39*✓	35*✓
Traumatic brain injury	40*✓	53*✓
Visual impairment	13*✓	20*✓

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

*Note:* Parent survey respondents were asked how well youth communicate by any means and how well youth understand what other people say to them. 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. The universe is all youth. More information is provided in appendix C, tables C-4 and C-5.

- **The vast majority of youth in most disability groups have no difficulty with sensory and motor functions** (table 5; see tables C-8 to C-11 for more detail). Overall, parents report that 22 percent of youth with an IEP have trouble seeing with glasses or contacts, and 5 to 10 percent have trouble hearing with a hearing aid or using their arms or legs. The only groups in which more than half of youth have trouble with these functions are those where disability categories are defined by one of these limitations, namely youth with visual impairments (93 percent have trouble seeing), deaf-blindness (70 percent have trouble hearing), hearing impairments (61 percent have trouble hearing), and orthopedic impairments (54 percent have trouble using arms and 68 percent have trouble using legs).<sup>17</sup>

**Table 5. Percentages of youth who have trouble seeing, hearing, using arms and hands, and using legs and feet, by disability group**

Disability group	Trouble seeing (with glasses or contacts)	Trouble hearing (with a hearing aid)	Trouble using arms and hands	Trouble using legs and feet
<b>Youth with an IEP overall</b>	<b>22</b>	<b>5</b>	<b>10</b>	<b>9</b>
Autism	20	4*	10	9
Deaf-blindness	49*✓	70*✓	22!	26*✓
Emotional disturbance	23	2*	8*	6*
Hearing impairment	22	61*✓	10	6*
Intellectual disability	28*✓	10*	15*	12*
Multiple disabilities	37*✓	10*	33*✓	35*✓
Orthopedic impairment	31*✓	6	54*✓	68*✓
Other health impairment	21	5	9	8
Specific learning disability	21*	4*	8*	6*
Speech or language impairment	17*✓	3*	7*	5*
Traumatic brain injury	35*✓	7	24*✓	20*✓
Visual impairment	93*✓	4!	14	11

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

Note: Parent survey respondents were asked how well youth see, hear, use their arms and hands, and use their legs and feet. Trouble seeing refers to parents' responses of a little trouble, a lot of trouble, or no ability to see, versus a response of no trouble. Trouble hearing refers to parents' responses of a little trouble or mild hearing loss, a lot of trouble or moderate hearing loss, or no ability to hear, versus a response of hears normally. Trouble using arms and hands, or legs and feet, refers to parents' responses that their children do not have normal use or have no use at all of these appendages, versus a response of normal use.

Source: National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix C, tables C-8 to C-11.

<sup>17</sup> For youth with visual impairments, deaf-blindness, and hearing impairments, some of their parents might have indicated they have no trouble seeing and hearing when their children use glasses or contacts and hearing aids, respectively. For youth with orthopedic impairments, some of them might have other types of conditions than those that limit the use of arms, hands, legs, and feet.

- **Considering communication, sensory, and motor function difficulties together, youth with deaf-blindness, multiple disabilities, and orthopedic impairments face the most extensive functional challenges** (table C-12). The disability groups vary greatly in their average scores on a functional abilities index that measures the prevalence and degree of functional limitations across eight parent-reported measures discussed above (communicating through any means, speaking clearly, carrying on an oral conversation, understanding what others say, seeing with glasses or contacts, hearing with a hearing aid, using arms and hands, and using legs and feet).<sup>18</sup> Youth with deaf-blindness, multiple disabilities, and orthopedic impairments have the most difficulty with functional abilities (indicated by the lowest average index scores), whereas youth with specific learning disabilities have the least difficulty (indicated by the highest average index score).

### **Difficulty performing activities indicative of living independently is more common among groups with poorer health or communication challenges**

The ability to function independently at home and in the community is linked to improved early adulthood outcomes, such as employment, for youth with disabilities (Carter et al., 2012; Roessler, Brolin, & Johnson 1990). For this reason, a key goal of transition services provided through IDEA 2004 is to help youth develop the capacity to live as independently as possible. The supports youth need to become self-sufficient depend on their individual needs, although several indicators highlight the potential for greater issues ahead for youth with an IEP than their peers (see Volume 1). For example, typical teenage “activities of daily living,” such as using an automated teller machine (ATM), making appointments, getting to nearby places, fixing meals, doing laundry, straightening up living areas, and shopping without help, are less likely to be performed by youth with an IEP than their peers, on average. In addition, youth with an IEP overall are less likely to be learning how to manage money through having a bank account (45 versus 57 percent) and money to spend (61 versus 67 percent). Difficulty in these areas does not necessarily mean youth will not become self-sufficient. Many factors can affect the ability to perform these activities without assistance, such as the ability to understand others and cognitive capacities (Bal, Kim, Cheong, & Lord, 2015).

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<sup>18</sup> The functional abilities index is an average of ratings of 0, 1, 2, or 3 on each parent-reported measure, with 0 indicating no ability and 3 indicating normal ability (see appendix A). Youth with deaf-blindness, multiple disabilities, or orthopedic impairments have the three lowest average index scores (1.9, 2.2, and 2.3, respectively), compared with 2.7 for all youth with an IEP. These scores are lower than the scores of 95, 91, and 88 percent of all youth with an IEP, respectively.

- **Youth in four disability groups—autism, intellectual disability, multiple disabilities, and orthopedic impairments—are less likely to perform activities of daily living without assistance** (table 6; see tables C-13 to C-19 for more detail). Smaller proportions of youth in these four groups relative to youth with an IEP overall perform each of the seven activities of daily living measured in this study without help at least “pretty well” or “usually”, according to parents. All of the differences exceed 10 percentage points. Youth in these disability groups are also among those who tend to have poorer health and more difficulty communicating (see figure 12 and table 4). An index capturing the ability to perform all of these activities confirms that youth in these four groups have more extensive difficulties completing these activities independently (table C-20).<sup>19</sup> For example, at most one-quarter of youth in these four groups and deaf-blindness have index scores that are above-average for all youth with an IEP (figure 15; see table C-21 for more detail). Youth with specific learning disabilities have the least extensive difficulties with these activities, on average, among the disability groups.

**Table 6. Percentages of youth who complete activities of daily living without help at least pretty well or usually, by disability group**

Disability group	Using an ATM	Making appointments	Getting to places outside the home	Fixing own breakfast or lunch	Doing laundry	Straightening up own room or living area	Buying a few items they need at the store
<b>Youth with an IEP overall</b>	<b>37</b>	<b>30</b>	<b>85</b>	<b>52</b>	<b>30</b>	<b>48</b>	<b>40</b>
Autism	16*✓	10*✓	55*✓	41*✓	14*✓	35*✓	21*✓
Deaf-blindness	29	15!✓	51*✓	32*✓	27	48	19*✓
Emotional disturbance	40	28	90*✓	52	30	38*✓	40
Hearing impairment	42	29	86	58*✓	35*✓	61*✓	46*✓
Intellectual disability	16*✓	12*✓	60*✓	39*✓	20*✓	43*	24*✓
Multiple disabilities	17*✓	12*✓	43*✓	30*✓	14*✓	30*✓	21*✓
Orthopedic impairment	24*✓	19*✓	53*✓	26*✓	11*✓	28*✓	22*✓
Other health impairment	37	27*	89*	53	28	44*	38
Specific learning disability	45*✓	39*✓	94*✓	58*✓	35*✓	54*✓	47*✓
Speech or language impairment	40	32	91*✓	59*✓	30	56*✓	42
Traumatic brain injury	30	20*✓	78	46	16*✓	39*✓	35
Visual impairment	29*✓	32	64*✓	45	25	54	35

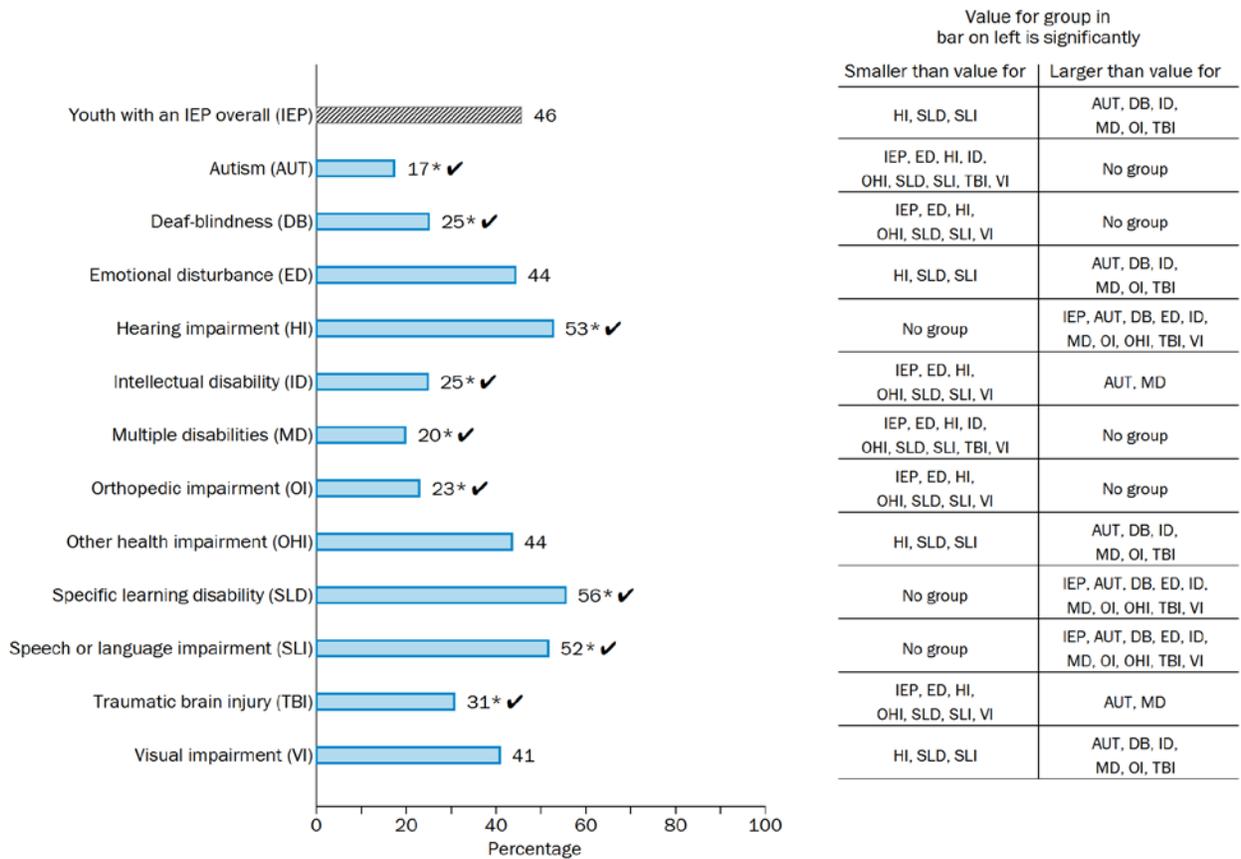
\*= $p < .05$  for comparison with IEP estimate; ✓=comparison is statistically significant and at least 5 percentage points in magnitude; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate.

Note: Parent survey respondents were asked to indicate youth’s ability to perform the activity without help. For the first three measures, the table focuses on ratings of very well or pretty well, versus not very well, not at all well, or not allowed. For the next four measures, the table focuses on ratings of always or usually, versus sometimes or never.

Source: National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix C, tables C-13 to C-19.

<sup>19</sup> The activities of daily living index is an average of ratings of 0, 1, 2, or 3 on each activity in table 6, with 0 indicating no ability and 3 indicating normal ability (see appendix A). Youth with multiple disabilities, orthopedic impairments, autism, deaf-blindness, and intellectual disability have the five lowest average index scores (0.8, 0.9, 0.9, 1.0, 1.0 respectively), compared with 1.5 for all youth with an IEP. These scores are lower than the scores of 82, 75, 75, and 67 percent of all youth with an IEP, respectively. The average score for youth with specific learning disabilities (1.7) is lower than the scores of 39 percent of all youth with an IEP.

**Figure 15. Percentages of youth who perform activities of daily living well, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Performing well on activities of daily living is based on having an index score on a seven-item activities of daily living index that is at or above the average index score for youth with an IEP. The components of the index include categorical versions of the measures in table 6. Appendix A provides more information on how the index is constructed.

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

- **Below-average proportions of youth with autism, multiple disabilities, and orthopedic impairments are learning to drive and registering to vote** (table 7; see tables C-22 and C-23 for more detail). Overall, 28 percent of youth with an IEP ages 15 or older report having a driver’s license or learner’s permit and 44 percent of those 18 or older report having registered to vote.<sup>20</sup> On each measure, the proportions for youth with autism, multiple disabilities, and orthopedic impairments are at least 10 percentage points lower. In addition, youth with intellectual disability are nearly 20 percentage points less likely than youth with an IEP overall to be learning to drive. In contrast, larger proportions of youth with specific learning disabilities are learning to drive (35 percent) and registering to vote (49 percent). For many youth, the opportunity to get a driver’s license is an important marker of their growing independence, and registering to vote is an indicator of their civic engagement. Compared with their peers, youth with an IEP on average are nearly half as likely to be learning to drive (51 versus 28 percent), but just as likely to be registering to vote (see Volume 1).

**Table 7. Percentages of youth who are learning to drive and registering to vote, by disability group**

Disability group	Has a driver’s license or learner’s permit (age 15 or older)	Registered to vote (age 18 or older)
<b>Youth with an IEP overall</b>	<b>28</b>	<b>44</b>
Autism	14*✓	34*✓
Deaf-blindness	‡	43!
Emotional disturbance	22*✓	51
Hearing impairment	37*✓	43
Intellectual disability	10*✓	39
Multiple disabilities	15*✓	25*✓
Orthopedic impairment	17*✓	31*✓
Other health impairment	31	45
Specific learning disability	35*✓	49*✓
Speech or language impairment	34	58*✓
Traumatic brain injury	27	40
Visual impairment	‡	37

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

Note: Youth survey respondents were asked to indicate whether they have a driver’s license or learner’s permit and whether they are registered to vote.

Source: National Longitudinal Transition Study 2012. The universe for column 1 is youth who are at least 15 years old and have not been identified by a professional as having a blindness, deafness and blindness, or visual impairment. The universe for column 2 is youth who are at least 18 years old. More information is provided in appendix C, tables C-22 and C-23.

<sup>20</sup> Youth were not asked whether they are learning to drive if their parents indicated in the survey that their children have a visual impairment or deaf-blindness.

- **Youth in mostly different disability groups are less likely to gain experiences managing money** (table 8; see tables C-24 and C-25 for more detail). Although youth with autism and orthopedic impairments may be disadvantaged in terms of driving and voting, they are not the most disadvantaged groups when it comes to learning how to handle their finances. However, youth with multiple disabilities, along with those with deaf-blindness, are less likely than youth with an IEP overall to report having an allowance or money to spend (52 and 44 percent versus 61 percent). Between 37 and 39 percent of youth with emotional disturbance and intellectual disability, two groups that are more likely to live in low-income households (see chapter 2), indicate having a savings or checking account, at least 6 percentage points less than youth with an IEP on average (45 percent). In contrast, youth with speech or language impairments are above average on both of these measures (51 and 67 percent, respectively). The disparities among the groups are important to note because lack of opportunities to develop personal finance skills may make it harder for youth to become financially proficient after high school (Bernheim, Garrett, & Maki, 2001).

**Table 8. Percentages of youth who are gaining experience managing money, by disability group**

Disability group	Has money to spend, such as from an allowance or job	Has a checking or savings account
<b>Youth with an IEP overall</b>	<b>61</b>	<b>45</b>
Autism	59	51*✓
Deaf-blindness	44*✓	44
Emotional disturbance	62	39*✓
Hearing impairment	62	49
Intellectual disability	58*	37*✓
Multiple disabilities	52*✓	44
Orthopedic impairment	56	43
Other health impairment	65	50*✓
Specific learning disability	62	44
Speech or language impairment	67*✓	51*✓
Traumatic brain injury	61	52
Visual impairment	69	56*✓

\*= $p < .05$  for comparison with IEP 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, such as money earned from a job.

Source: National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix C, tables C-24 and C-25.

### Youth with autism and intellectual disability show less self-determination than youth with an IEP overall

Many disability experts view youths' sense of self-determination as important for their success in adulthood (Canha, Simoes, Owens, & Gaspar de Matos, 2016; Shogren & Shaw, 2016; Shogren, Wehmeyer, Palmer, Rifenburg, & Little, 2015). Some special education policies and services are designed to enhance self-determination; for example, the emphasis that IDEA 2004 places on helping youth to define and pursue specific postsecondary goals is grounded in part on expert opinion that this process contributes to their ability to shape their own futures. Measures of self-determination include at least two key dimensions: (1) personal autonomy and (2) self-direction. Autonomy refers to acting according to one's preferences, interests, and abilities, free of undue external interference. Self-direction combines concepts known as self-realization and psychological empowerment. It refers to having a good understanding of strengths and needs, while believing one's actions are related to outcomes (Wehmeyer, 2003; Shogren & Shaw, 2016).<sup>21</sup> On average, youth with an IEP have a weaker sense of personal autonomy than their peers do, but their sense of self-direction is similar (see Volume 1).

- **Youth with autism and intellectual disability are less likely than those with an IEP overall to engage in activities that demonstrate their autonomy** (table 9; see tables C-26 to C-32 for more detail). Both groups are less likely to report choosing activities to do with friends, communicating with friends and family, and planning weekend activities they like to do. For example, 45 percent of youth with autism and 48 percent of those with intellectual disability choose activities to do with friends at least most of the time, compared with 56 percent of youth with an IEP overall. Youth with autism are also less likely to pursue two additional activities: going to movies, concerts, and dances, and volunteering in activities of interest. An index that considers the seven items together indicates that youth with autism have the most extensive difficulties among the disability groups with demonstrating their autonomy (table C-33).<sup>22</sup> These findings are consistent with Chou et al. (2016), who found that youth with autism just prior to when the NLTS 2012 data were collected had significantly lower levels of autonomy than youth with specific learning disabilities. In contrast, youth with deaf-blindness, many of whom have significant functional limitations, report the least extensive challenges with demonstrating their personal autonomy according to the index.

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<sup>21</sup> The measures used here come from a scale called the Arc Self-Determination Scale (SDS), and include questions pertaining to autonomy, psychological empowerment, and self-realization. The SDS developer recommended self-direction to define the combined concepts of psychological empowerment and self-realization.

<sup>22</sup> The personal autonomy index is an average of ratings of 0, 1, 2, or 3 on each activity, with 0 indicating never, even when there is a chance, and 3 indicating always (see appendix A). The average index score for youth with autism (1.4) is lower than the scores of 56 percent of all youth with an IEP (average score is 1.6). The average index score for youth with deaf-blindness (1.9) is lower than the scores of 30 percent of all youth with an IEP.

**Table 9. Percentages of youth who report pursuing activities that demonstrate personal autonomy at least most of the time, by disability group**

Disability group	Choosing activities to do with friends	Writing letters, texts, or talking on the phone to friends and family	Choosing gifts to give to family and friends	Planning weekend activities that they like to do	Going to restaurants that they like	Going to movies, concerts, and dances	Volunteering in activities of interest
<b>Youth with an IEP overall</b>	<b>56</b>	<b>62</b>	<b>49</b>	<b>51</b>	<b>49</b>	<b>39</b>	<b>41</b>
Autism	45*✓	44*✓	44	41*✓	51	31*✓	30*✓
Deaf-blindness	51	88*✓	72*✓	66	52	49	53
Emotional disturbance	60*	61	49	50	45*	36	36*
Hearing impairment	56	63	50	52	49	37	37
Intellectual disability	48*✓	55*✓	44*	45*✓	46	37	37
Multiple disabilities	53	56	46	52	48	36	36
Orthopedic impairment	61	71*✓	57	51	57*✓	43	45
Other health impairment	57	65	45*	51	49	38	42
Specific learning disability	57	65*	52*	54*	50	41*	43*
Speech or language impairment	57	60	48	55	49	36	39
Traumatic brain injury	59	59	47	55	53	42	38
Visual impairment	61	70*✓	57	62*✓	52	45	43

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

Note: Youth survey respondents, excluding proxies, were asked how they act in each situation. The response categories were that they pursue the activities every time they have the chance; most of the time when they have the chance; sometimes when they have the chance; and never, not even when there is a chance. The table reports the proportions of youth indicating that they pursue the activities at least most of the time.

Source: National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix C, tables C-26 to C-32.

- **Almost all youth in each disability group except for autism report a positive sense of self-direction** (table 10; see tables C-34 to C-38 for more detail). About 90 percent of youth across nearly all the disability groups report positive views about their self-direction.<sup>23</sup> Youth with autism are an exception, reporting a weaker sense of self-direction than youth with an IEP overall on 5 of 14 items in the survey. The biggest difference for youth with autism relative to all youth with an IEP is in terms of being able to make friends in new situations (67 versus 86 percent). Chou et al. (2016) also found that a recent set of youth with autism reported lower levels of some aspects of self-direction—namely, those related to psychological empowerment such as the first three measures in table 10 (and in this case, relative to youth with specific learning disabilities).

**Table 10. Percentages of youth who report a positive sense of self-direction according to five indicators, by disability group**

	Know how to make friends	Can make friends in new situations	Tell people when I think I can do something others tell me I cannot do	Know how to make up for own limitations	Feel that they are loved because they give love
<b>Youth with an IEP overall</b>	<b>92</b>	<b>86</b>	<b>88</b>	<b>90</b>	<b>93</b>
Autism	76*✓	67*✓	81*✓	83*✓	87*✓
Deaf-blindness	97	85	71	84	97
Emotional disturbance	88*	80*✓	88	88	90*
Hearing impairment	91	82	91*	92	91
Intellectual disability	92	86	85*	82*✓	93
Multiple disabilities	91	80*✓	88	87	91
Orthopedic impairment	95*	87	88	95*	97*
Other health impairment	94	86	90	90	95*
Specific learning disability	93*	89*	89	92*	93
Speech or language impairment	95*	87	89	92	94
Traumatic brain injury	91	83	91	84*✓	92
Visual impairment	90	82	91	94	95

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

Note: Youth survey respondents, excluding proxies, were asked to indicate whether they agree with each statement.

Source: National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix C, tables C-34 to C-38.

<sup>23</sup> Self-direction is measured by 14 perceptions that youth may have about themselves (tables C-34 to C-47). These perceptions are whether trying hard in school will lead to a good job; they are persistent even when getting something wrong; they know how to make friends; they can make good choices; they can make choices that are important to them; they can make friends in new situations; they tell people when they think they can do something others tell them they cannot do; they know what they do best; they like themselves; they are confident in their own abilities; they perceive that other people like them; they perceive it is better to be themselves than popular; they know how to make up for their limitations; and they feel loved because they give love.

**Within half the disability groups, the oldest students and those with lower functional abilities face greater challenges with health and activities of daily living**

Health and the ability to function independently in high school may be related not only to disabilities but also to students’ backgrounds and the characteristics of their schools. For example, some studies suggest that socioeconomic disadvantage is associated with poorer health and other youth outcomes (Newacheck, Hung, Park, Brindis, & Irwin, 2003). Examining how general health and performance on activities of daily living across the disability groups vary by students’ demographic and school characteristics provides a more detailed look at which youth face the greatest challenges. The findings do not identify the causes of why health and task performance differ between demographic and school characteristic groups, but they help identify issues that can be explored in future research.<sup>24</sup>

- **Parents report that youth in low-income households are less healthy than those in higher-income households in nearly every disability group, but no differences exist in performance of daily living tasks by income category across the disability groups** (table 11a; see tables C-48 and C-49 for more detail). Overall, 37 percent of youth with an IEP in low-income households do not have very good or excellent general health according to parents, compared with 20 percent in higher-income households. This difference based on household income occurs in 10 disability groups (all the groups except youth with deaf-blindness and visual impairments). In contrast, low-income and higher-income youth have similar abilities to perform daily living tasks within each of the disability groups.

**Table 11a. Household income groups less likely to be in very good or excellent health or perform activities of daily living well, by disability group**

Disability group	Groups less likely to:	
	Be in very good or excellent health (parent reported)	Perform activities of daily living well (parent reported)
<b>Youth with an IEP overall</b>	<b>Low income</b>	
Autism	Low income	
Deaf-blindness		
Emotional disturbance	Low income	
Hearing impairment	Low income	
Intellectual disability	Low income	
Multiple disabilities	Low income	
Orthopedic impairment	Low income	
Other health impairment	Low income	
Specific learning disability	Low income	
Speech or language impairment	Low income	
Traumatic brain injury	Low income	
Visual impairment		

*Note:* A household income group is identified if it is less likely than the other household income group to be in very good or excellent health or perform activities of daily living well (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across household income groups that meet this criterion. The groups are youth in low income and higher income households.

*Source:* National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix C, tables C-48 to C-49.

<sup>24</sup> The small number of students in some disability groups and with some of these characteristics means that what look like differences between subgroups of students could be due to random chance. For this reason, similar to the rest of the report, two subgroups are considered different on a measure only when the difference is statistically significant and at least five percentage points in size. In addition, the text focuses on describing subgroup differences that exist for all youth with an IEP and at least one disability group.

- In nearly every disability group, Hispanic or both Hispanic and Black youth are disadvantaged in terms of health but not in terms of performance on activities of daily living** (table 11b; see tables C-48 and C-49 for more detail). In 11 disability groups, Hispanic youth are less likely than youth who are neither Black nor Hispanic (specifically, White, Asian, and other youth) to have very good or excellent general health according to parents. Within three of these groups—youth with intellectual disability, orthopedic impairments, and specific learning disabilities—Black youth also have poorer general health than White, Asian, and other youth overall. However, Black and Hispanic youth with other health impairments and specific learning disabilities, and Black youth with emotional disturbance, are more likely than White, Asian, and other youth to perform activities of daily living.

**Table 11b. Racial and ethnic groups less likely to be in very good or excellent health or perform activities of daily living well, by disability group**

Disability group	Groups less likely to:	
	Be in very good or excellent health (parent reported)	Perform activities of daily living well (parent reported)
<b>Youth with an IEP overall</b>	<b>Black Hispanic</b>	<b>White, Asian, other</b>
Autism	Hispanic	
Deaf-blindness	Hispanic	
Emotional disturbance	Hispanic	White, Asian, other
Hearing impairment	Hispanic	
Intellectual disability	Black Hispanic	
Multiple disabilities	Hispanic	
Orthopedic impairment	Black Hispanic	
Other health impairment	Hispanic	White, Asian, other
Specific learning disability	Black Hispanic	White, Asian, other
Speech or language impairment	Hispanic	
Traumatic brain injury		
Visual impairment	Hispanic	

Note: A racial or ethnic group is identified if it is less likely than at least one other racial and ethnic group to be in very good health or excellent or perform activities of daily living well (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across racial and ethnic groups that meet this criterion. The groups are Black, Hispanic, and a combined group of White, Asian, and other youth.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix C, tables C-48 to C-49.

- **Within disability groups, few differences by gender exist in health and performance on activities of daily living** (table 11c; see tables C-48 and C-49 for more detail). Among the larger set of all youth with an IEP, parents report that general health is worse for girls than for boys but that performance of activities of daily living is worse for boys. However, these differences are only significant within a few disability groups. In particular, according to parents, girls with intellectual disability and other health impairments have worse health than boys in the same disability groups. Boys with speech or language impairments are less likely than girls to perform activities of daily living well (49 versus 57 percent).

**Table 11c. Gender groups less likely to be in very good or excellent health or perform activities of daily living well, by disability group**

Disability group	Groups less likely to:	
	Be in very good or excellent health (parent reported)	Perform activities of daily living well (parent reported)
<b>Youth with an IEP overall</b>	<b>Female</b>	<b>Male</b>
Autism		
Deaf-blindness		
Emotional disturbance		
Hearing impairment		
Intellectual disability	Female	
Multiple disabilities		
Orthopedic impairment		
Other health impairment	Female	
Specific learning disability		
Speech or language impairment		Male
Traumatic brain injury		
Visual impairment		

Note: A gender group is identified if it is less likely than the other gender group to be in very good or excellent health or perform activities of daily living well (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across gender groups that meet this criterion. The groups are female and male youth.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix C, tables C-48 to C-49.

- **The oldest youth with an IEP have worse health in four disability groups, but the youngest in most disability groups face greater challenges performing daily living tasks** (table 11d; see tables C-50 and C-51 for more detail). Among youth with autism, emotional disturbance, hearing impairments, and speech or language impairments, the oldest youth still enrolled in school (those older than 18) are at least 9 percentage points less likely than those ages 15 to 18 to have very good or excellent general health according to parents. In contrast, parents report that the youngest youth (ages 14 or younger) are less likely to perform activities of daily living well within nine groups—all except for deaf-blindness, multiple disabilities, and orthopedic impairments.

**Table 11d. Age groups less likely to be in very good or excellent health or perform activities of daily living well, by disability group**

Disability group	Groups less likely to:	
	Be in very good or excellent health (parent reported)	Perform activities of daily living well (parent reported)
<b>Youth with an IEP overall</b>	<b>19 or older</b>	<b>14 or younger 19 or older</b>
Autism	19 or older	14 or younger
Deaf-blindness		14 or younger
Emotional disturbance	19 or older	15 to 18
Hearing impairment	19 or older	14 or younger
Intellectual disability		14 or younger
Multiple disabilities		19 or older
Orthopedic impairment		19 or older
Other health impairment		14 or younger
Specific learning disability		14 or younger
Speech or language impairment	19 or older	15 to 18
Traumatic brain injury		14 or younger
Visual impairment		14 or younger

Note: An age group is identified if it is less likely than at least one other age group to be in very good or excellent health or perform activities of daily living well (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across age groups that meet this criterion. The groups are youth who are 14 years old or younger, 15 to 18 years old, and 19 years old or older.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix C, tables C-50 to C-51.

- In nearly all disability groups, youth with lower functional abilities are more likely than those with higher functional abilities to have poorer health and challenges performing activities of daily living (table 11e; see tables C-50 and C-51 for more detail). The difference in parent-reported general health between youth with lower and higher functional abilities (based on communication, sensory, and motor abilities) occurs within all disability groups except for deaf-blindness and visual impairments, and ranges between 13 and 25 percentage points. The difference in parent-reported performance on activities of daily living occurs within all groups except for youth with hearing impairments, and ranges between 9 and 62 percentage points.

**Table 11e. Functional abilities groups (higher or lower) less likely to be in very good or excellent health or perform activities of daily living well, by disability group**

Disability group	Groups less likely to:	
	Be in very good or excellent health (parent reported)	Perform activities of daily living well (parent reported)
<b>Youth with an IEP overall</b>	<b>Lower</b>	<b>Lower</b>
Autism	Lower	Lower
Deaf-blindness		Lower
Emotional disturbance	Lower	Lower
Hearing impairment	Lower	
Intellectual disability	Lower	Lower
Multiple disabilities	Lower	Lower
Orthopedic impairment	Lower	Lower
Other health impairment	Lower	Lower
Specific learning disability	Lower	Lower
Speech or language impairment	Lower	Lower
Traumatic brain injury	Lower	Lower
Visual impairment		Lower

Note: A functional abilities index group is identified if it is less likely than the other functional abilities index group to be in very good or excellent health or perform activities of daily living well (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across functional abilities index groups that meet this criterion. The groups are youth with lower and higher functional abilities index scores.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix C, tables C-50 to C-51.

- **In most disability groups, no significant differences exist in health or daily living task performance based on whether youth are in a lower-performing or higher-performing school** (table 11f; see tables C-52 and C-53 for more detail). Within the larger set of youth with an IEP, parents report that those in lower-performing schools are less likely to be in very good or excellent health than those in higher-performing schools. However, the difference is significant only for youth with orthopedic impairments or specific learning disabilities. Among youth with deaf-blindness, those attending higher-performing schools are more likely to have poorer health. Parents also report that youth in higher-performing schools are more disadvantaged in terms of daily living task performance among those with deaf-blindness, emotional disturbance, and other health impairments.

**Table 11f. School academic performance groups (higher or lower performing) less likely to be in very good or excellent health or perform activities of daily living well, by disability group**

Disability group	Groups less likely to:	
	Be in very good or excellent health (parent reported)	Perform activities of daily living well (parent reported)
<b>Youth with an IEP overall</b>	<b>Lower performing</b>	No data
Autism		
Deaf-blindness	Higher performing	Higher performing
Emotional disturbance		Higher performing
Hearing impairment		
Intellectual disability		
Multiple disabilities		
Orthopedic impairment	Lower performing	
Other health impairment		Higher performing
Specific learning disability	Lower performing	
Speech or language impairment		
Traumatic brain injury		
Visual impairment		

Note: A school academic performance group is identified if it is less likely than the other school academic performance group to be in very good or excellent health or perform activities of daily living well (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across school academic performance groups that meet this criterion. The groups are youth in lower performing and higher performing schools.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix C, tables C-52 to C-53.

- **Youth in urban areas have worse general health than those in other areas within most disability groups, but little variation exists by locale for daily living tasks** (table 11g; see tables C-52 and C-53 for more detail). Parents report that general health is worse for youth in city schools than for those in suburban or rural schools within seven disability groups—those with autism, intellectual disability, multiple disabilities, orthopedic impairments, other health impairments, specific learning disabilities, and speech or language impairments. General health is also worse for youth in town or rural area schools in two disability groups—specific learning disabilities and traumatic brain injuries. Few differences exist in performance on activities of daily living based on school locale.

**Table 11g. School locale groups less likely to be in very good or excellent health or perform activities of daily living well, by disability group**

Disability group	Groups less likely to:	
	Be in very good or excellent health (parent reported)	Perform activities of daily living well (parent reported)
<b>Youth with an IEP overall</b>	<b>City</b>	<b>Town or rural</b>
Autism	City	
Deaf-blindness		Suburb
Emotional disturbance		
Hearing impairment		
Intellectual disability	City	
Multiple disabilities	City	
Orthopedic impairment	City	
Other health impairment	City	
Specific learning disability	City	Town or Rural
Speech or language impairment	City	
Traumatic brain injury	Town or Rural	Town or Rural
Visual impairment		

Note: A school locale group is identified if it is less likely than at least one other school locale group to be in very good or excellent health or perform activities of daily living well (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across school locale groups that meet this criterion. The groups are youth attending school in a city, suburb, or town or rural area.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix C, tables C-52 to C-53.

- **Within nearly all disability groups, general health and abilities to perform daily activities do not vary by the size of the special education population in the youth’s school** (see tables C-52 and C-53 for more detail). The exception is that youth with other health impairments who attend schools with larger populations of students in special education are more likely to have worse health. Parent-reported general health and abilities to perform daily activities do not vary by a school’s special education population size for youth with an IEP overall.

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## **Chapter 4. How engaged are youth in school and with friends?**

School engagement and positive peer relationships are crucial components of youth development that may have important social and academic benefits (Anderson, Christenson, Sinclair, & Lehr, 2004; Juvonen, Espinoza, & Knifsend, 2012; Wang & Eccles, 2012). Yet, research conducted a decade ago suggests that some groups of youth with an individualized education program (IEP)—for example, youth with emotional disturbance—were at greater risk of being disengaged in school and of experiencing negative events such as being picked on and suspended (Wagner, Cadwallader, et al., 2003; Sullivan, Van Norman, & Klingbeil, 2014).

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### **Key findings in chapter 4**

- **Although about 8 in 10 youth in each disability group feel positive about their school experiences, many, especially youth with intellectual disability, struggle academically.** The vast majority of youth in each group report feeling happy at school. However, about half of youth in nearly all disability groups report facing academic challenges. These challenges are most common among youth with intellectual disability, two-thirds of whom find class work difficult and need more help from teachers. Youth with intellectual disability are also most likely to repeat a grade in school according to their parents (37 percent).
- **Youth in five groups are less likely to interact with friends and in two of these—intellectual disability, and multiple disabilities—they are also less likely to participate in school sports and clubs.** Overall, 52 percent of youth with an IEP report getting together with friends weekly and 64 percent report participating in extracurricular school activities. However, smaller proportions of youth with autism, deaf-blindness, intellectual impairments, multiple disabilities, and orthopedic impairments socialize with friends at least weekly (16 to 42 percent). Youth with intellectual disability and multiple disabilities are also less likely than youth with an IEP, on average, to participate in school activities (57 and 53 percent). In contrast, youth with emotional disturbance and other health impairments are more involved with friends (58 and 57 percent), and those with deaf-blindness and speech or language impairments have the highest participation rates in school sports and clubs (81 and 73 percent).
- **Youth with emotional disturbance are the most likely disability group to be suspended, expelled, arrested, and bullied.** The proportions of youth in this group who have been suspended (65 percent) or expelled (19 percent) according to their parents are more than twice those of all youth with an IEP (29 and 8 percent). And the proportion arrested (17 percent) is nearly three times greater (6 percent). In addition, youth with emotional disturbance are more likely than youth with an IEP overall to report being teased (47 versus 37 percent). These negative events are rarer for youth in other groups, particularly those with hearing, orthopedic, speech or language, and visual impairments.
- **Within about half the disability groups, youth in low-income households and lower-performing schools may be less engaged in school.** Low-income youth in five groups are more likely than higher-income youth to be suspended, and in seven groups they are less likely to participate in school sports and clubs. Similarly, youth in lower-performing schools in six groups are more likely than those in higher-performing schools to be suspended, and in one other group they participate less in sports and clubs.

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The Individuals with Disabilities Education Act (IDEA) of 2004 promotes efforts to help youth with an IEP stay engaged and avoid negative outcomes. For example, the law's regulations require schools to determine whether youth need supplementary aids or services to help them participate in extracurricular activities. The statute also requires states to monitor suspensions and expulsions among youth with an IEP, out of concern that these actions might not always be appropriate and can lead youth to remain out of school for substantial periods of time. Recently, the U.S. Department of Education has focused on the threat bullying can pose to youth with disabilities; when bullying prevents youth from accessing school services and other opportunities, it constitutes a denial of their rights as defined by IDEA 2004 (U.S. Department of Education, 2014). Current information

on how engagement varies by disability groups could help to inform ongoing policy in this area, as well as efforts to address these issues in districts and schools nationwide.

The sources of the key information in this chapter are as follows:

- *Perceptions about school and academic struggles*: youth and parent surveys
- *Getting together and communicating with friends*: youth survey
- *Participation in extracurricular sports and clubs*: youth survey
- *Negative events such as bullying, suspensions, expulsions, and arrests*: youth and parent surveys
- *Subgroup differences in engagement experiences*: youth and parent surveys

Detailed tables supporting the findings presented in this chapter are available in [appendix D](#).

### **Most youth in each disability group feel positive about school but many struggle academically, particularly youth with intellectual disability**

How youth feel about school and whether they keep up with coursework are important indicators of how they experience the educational process. Feeling good about school may promote academic performance, stronger ties to classmates, and positive behaviors (Bond et al., 2007; Sinclair, Christenson, & Thurlow, 2005). As indicated in Volume 1, most youth with and without an IEP have positive views about school and school staff. However, those with an IEP are on average more likely than their peers to find class work difficult, have trouble keeping up with homework, need extra help from teachers, and repeat grades. Findings from several studies have suggested that youth with an IEP may have a heightened risk for low engagement, because in the past they have had lower academic achievement and higher dropout rates than their peers (American Institutes for Research, 2013; Wagner, Newman, Cameto, & Levine, 2006).

- **At least 8 in 10 youth across most disability groups have positive views about their school experience** (table 12; see tables D-1 to D-4 for more detail). Most youth across the disability groups report feeling as if they are part of the school, close to people at school, happy to be at school, and safe at school. Two groups with the most positive views of school are those with deaf-blindness and visual impairments; the proportions who feel part of, happy at, and safe at school are at least 5 percentage points higher than reported by youth with an IEP overall. Youth with emotional disturbance are least likely among the disability groups to express these positive views, but even among them about three-quarters (73 to 85 percent).

**Table 12. Percentages of youth with positive views about their school experience, by disability group**

Disability group	Feel part of the school	Feel close to people at school	Happy to be at school	Feel safe at school
<b>Youth with an IEP overall</b>	<b>84</b>	<b>80</b>	<b>83</b>	<b>89</b>
Autism	86	80	88*	91
Deaf-blindness	100*✓	80	98*✓	100*✓
Emotional disturbance	73*✓	73*✓	74*✓	85*
Hearing impairment	81	82	84	88
Intellectual disability	83	78	81	88
Multiple disabilities	85	82	80	90
Orthopedic impairment	93*✓	85	87	93*
Other health impairment	85	82	84	89
Specific learning disability	84	80	84	89
Speech or language impairment	87*	86*✓	88*	92*
Traumatic brain injury	88	77	79	89
Visual impairment	91*✓	83	89*✓	95*✓

\*= $p < .05$  for comparison with IEP 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 with several statements about their 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. The universe is youth who were not homeschooled. More information is provided in appendix D, tables D-1 to D-4.

- **Nearly all youth across the disability groups have positive views about school staff** (table 13; see tables D-5 to D-8 for more detail). For example, about 90 percent of youth in all groups agree that staff encourage students to do their best, recognize when they do a good job, listen to them, and believe they will be successful. The same general pattern emerges with respect to several other impressions about school staff, namely whether staff treat students fairly, care about them, notice when they are not there, and want them to do their best (tables D-9 to D-12). No group stands out as being more or less likely than youth with an IEP overall to have positive views about school staff.

**Table 13. Percentages of youth with positive views about school staff, by disability group**

Disability group	Teachers encourage students to do their best	An adult at school tells me when I do a good job	An adult at school listens to me	An adult at school believes I will be a success
<b>Youth with an IEP overall</b>	<b>92</b>	<b>94</b>	<b>92</b>	<b>94</b>
Autism	93	94	93	95
Deaf-blindness	94	96	95	100*✓
Emotional disturbance	90*	93	88*	92
Hearing impairment	92	96	92	94
Intellectual disability	90	93	89*	91*
Multiple disabilities	90	93	91	92
Orthopedic impairment	96*	95	93	94
Other health impairment	93	94	92	94
Specific learning disability	92	93	93	94
Speech or language impairment	94	96*	94	95
Traumatic brain injury	95	95	95*	98*
Visual impairment	94	95	95	98*

\*= $p < .05$  for comparison with IEP 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 with several statements about their school staff. 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. The universe is youth who were not homeschooled. More information is provided in appendix D, tables D-5 to D-8.

- **About half of youth in most disability groups struggle academically in various ways, including nearly two-thirds of those with intellectual disability** (table 14; see tables D-13 to D-15 for more details). Despite having positive views about school, many youth across disability groups report difficulty with class work, trouble keeping up with homework, and needing more help from teachers. In most groups, about half of youth report these academic struggles, similar to youth with an IEP overall. Youth with intellectual disability are the most likely to report certain academic struggles, as 64 percent report that class work is hard to learn and 65 percent report needing more help from teachers.<sup>25</sup> They are also more likely than youth with an IEP overall to have repeated a grade in school, according to parents (37 versus 32 percent) (figure 16; see table D-17 for more detail).<sup>26</sup> In contrast, smaller proportions of youth with speech or language impairments find class work hard (47 percent), have trouble keeping up with homework (40 percent), and have repeated a grade (21 percent).

**Table 14. Percentages of youth who are having trouble with coursework, by disability group**

Disability group	Class work is hard to learn	Has trouble keeping up with homework	Needs more help from teachers
<b>Youth with an IEP overall</b>	<b>54</b>	<b>47</b>	<b>50</b>
Autism	57	49	52
Deaf-blindness	58	63	65
Emotional disturbance	48*✓	48	47
Hearing impairment	57	37*✓	50
Intellectual disability	64*✓	46	65*✓
Multiple disabilities	55	45	51
Orthopedic impairment	50	47	47
Other health impairment	57	56*✓	50
Specific learning disability	53	46	49
Speech or language impairment	47*✓	40*✓	48
Traumatic brain injury	65*✓	50	50
Visual impairment	53	44	39*✓

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

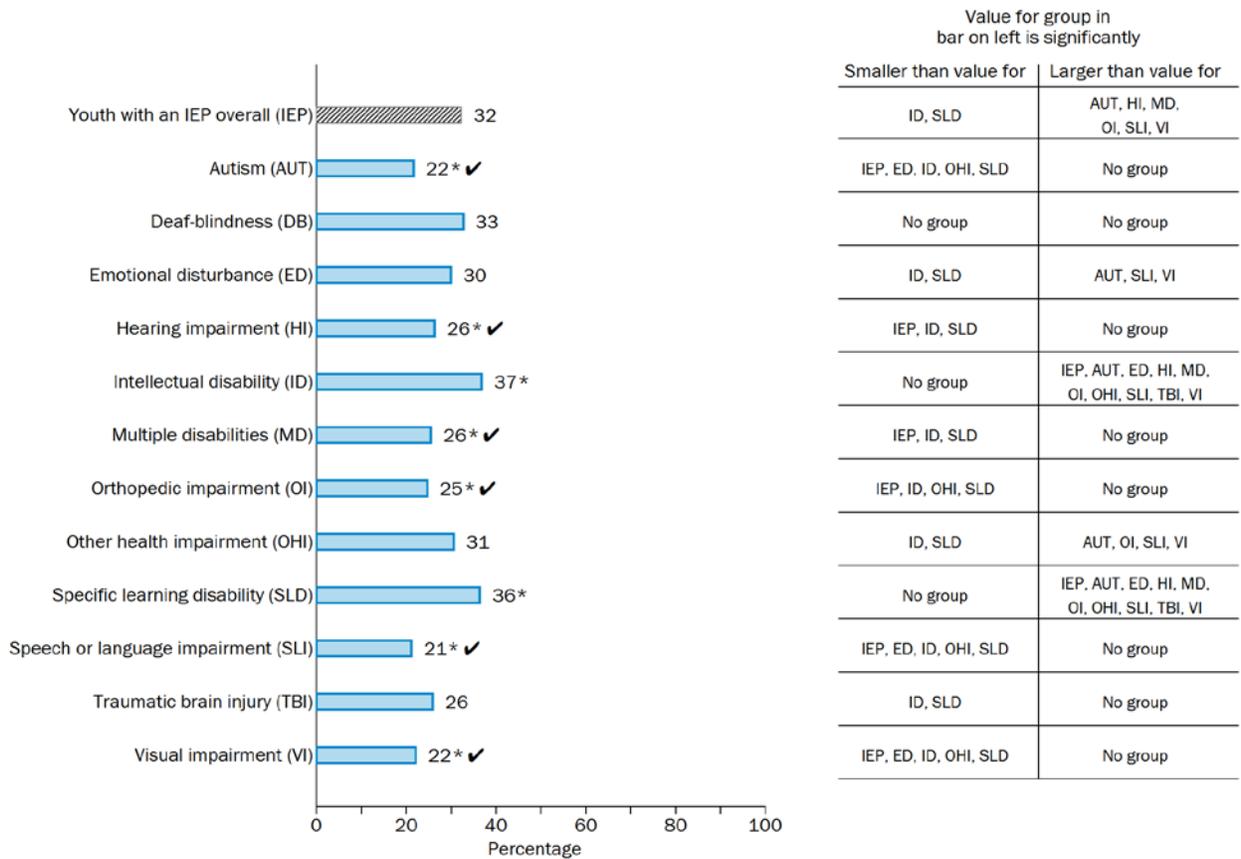
Note: Youth survey respondents, excluding proxies, were asked how strongly they agree or disagree with several statements about their classes overall. The response categories were agree a lot, agree a little, disagree a little, and disagree a lot. The percentages are for responses of agree a lot or agree a little.

Source: National Longitudinal Transition Study 2012. The universe is youth who were not homeschooled. More information is provided in appendix D, tables D-13 to D-15.

<sup>25</sup> Youth with intellectual disability are not more likely than youth with an IEP overall to have difficulty completing homework. This could partly reflect the fact that they have less homework to complete, on average. In particular, youth with an IEP overall and in most groups who report having homework assigned typically spend about five hours per week on it. However, youth with intellectual disability (and those with multiple disabilities) report spending about three hours per week, the least amount among the disability groups (table D-16).

<sup>26</sup> The difference between youth with intellectual disability and all youth with an IEP in terms of the proportion who have ever repeated a grade rounds to 5 percentage points, but is slightly less than 5 percentage points.

**Figure 16. Percentages of youth who have repeated a grade, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

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

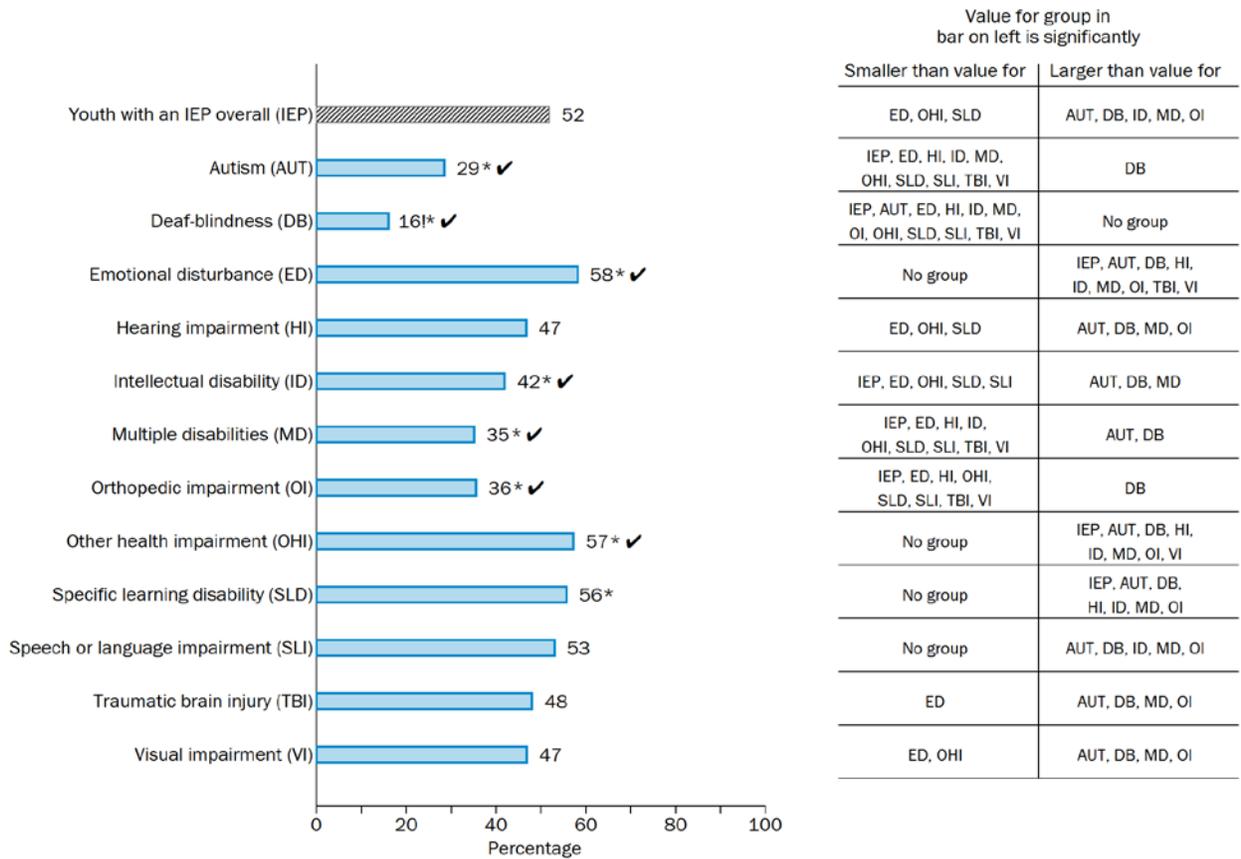
*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix D, table D-17.

### Youth in disability groups that have more trouble with communication and motor functions are less socially engaged than youth with an IEP overall

Getting together and communicating with friends outside of school are considered important ways for youth to develop social connectedness, emotional maturity, and their sense of self. Along with schools and families, friends can be a key source of support as youth transition from high school to adult life. These relationships can lead to valuable information about job opportunities and enhance quality of life (Canha et al. 2016; Cotterell, 2013; Kersh, Corona, & Siperstein, 2013). Prior studies found that youth with an IEP who spent more time interacting socially with friends and family were more likely to enroll in postsecondary education and experienced a greater sense of independence (Heal, Khoju, Rusch, & Harnisch, 1999). Youth with an IEP on average are less likely than their peers to get together with their friends weekly and to communicate with their friends daily (see Volume 1).

- Although overall half of youth with an IEP get together with friends weekly, the proportions are smaller for youth with autism, deaf-blindness, intellectual disability, multiple disabilities, and orthopedic impairments (figure 17; see table D-18 for more detail). In particular, 16 to 42 percent of youth in these five groups report getting together with friends weekly outside of school and organized activities, compared with 52 percent of youth with an IEP overall. As indicated in chapter 3, youth in these groups are more likely than youth with an IEP overall to have trouble with communication and/or motor functions as well, according to parents. In contrast, 58 percent of youth with emotional disturbance and 57 percent of youth with other health impairments usually get together with friends weekly. These proportions, large as they may be for youth with an IEP, are smaller than for all youth without an IEP (66 percent) (see Volume 1), suggesting that youth with an IEP, on average, may have less well developed social networks.

**Figure 17. Percentages of youth who usually got together with friends outside of school at least weekly in the past year, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Youth survey respondents were asked about many days a week they usually got together with friends outside of school and organized activities in the past 12 months. The response categories were 6 or 7 days a week; 4 or 5 days a week; 2 or 3 days a week; 1 day a week; sometimes, but not every week; and never. The percentages are for responses of at least 1 day a week.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix D, table D-18.

- **Youth with autism, intellectual disability, and multiple disabilities are also less likely than those with an IEP overall to communicate daily with their friends** (table 15; see tables D-19 to D-21 for more detail). Overall, 54 percent of youth with an IEP report that communicating with friends daily using text messages. In addition, 43 percent use social media and 38 percent use the telephone. The proportions for youth with autism are about half as large (about 20 percent for each mode). Smaller proportions of youth with intellectual disability and multiple disabilities communicate daily with friends using text messages and social media as well.<sup>27</sup> Few differences across other disability groups emerge with respect to their patterns of communication.

**Table 15. Percentages of youth who communicate daily with friends by text message, social media, and telephone, by disability group**

Disability group	Texting	Facebook, Twitter, and other social media	Talking on a telephone (cellular, landline, Skype, or video phone)
<b>Youth with an IEP overall</b>	<b>54</b>	<b>43</b>	<b>38</b>
Autism	22*✓	18*✓	20*✓
Deaf-blindness	41!	35	29!
Emotional disturbance	54	44	41
Hearing impairment	63*✓	46	38
Intellectual disability	39*✓	30*✓	38
Multiple disabilities	42*✓	34*✓	38
Orthopedic impairment	51	41	31*✓
Other health impairment	54	44	37
Specific learning disability	61*✓	47*	41*
Speech or language impairment	54	43	33*✓
Traumatic brain injury	50	38	26*✓
Visual impairment	48	36	30*✓

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

Note: Youth survey respondents, excluding proxies, were asked how often they use each communication method to communicate with friends. The response categories were several times a day, once a day, several times a week, once a week or less, and never. The percentages are for responses of at least once a day.

Source: National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix D, tables D-19 to D-21.

<sup>27</sup> Communicating daily with friends by instant messages is also less common for youth with autism, intellectual disability, and multiple disabilities than for all youth with an IEP (table D-22). The disability groups do not differ much in terms of how often they use email to communicate with friends (table D-23).

**Most youth in each disability group participate in extracurricular activities, but youth with intellectual disability or multiple disabilities have somewhat lower participation rates**

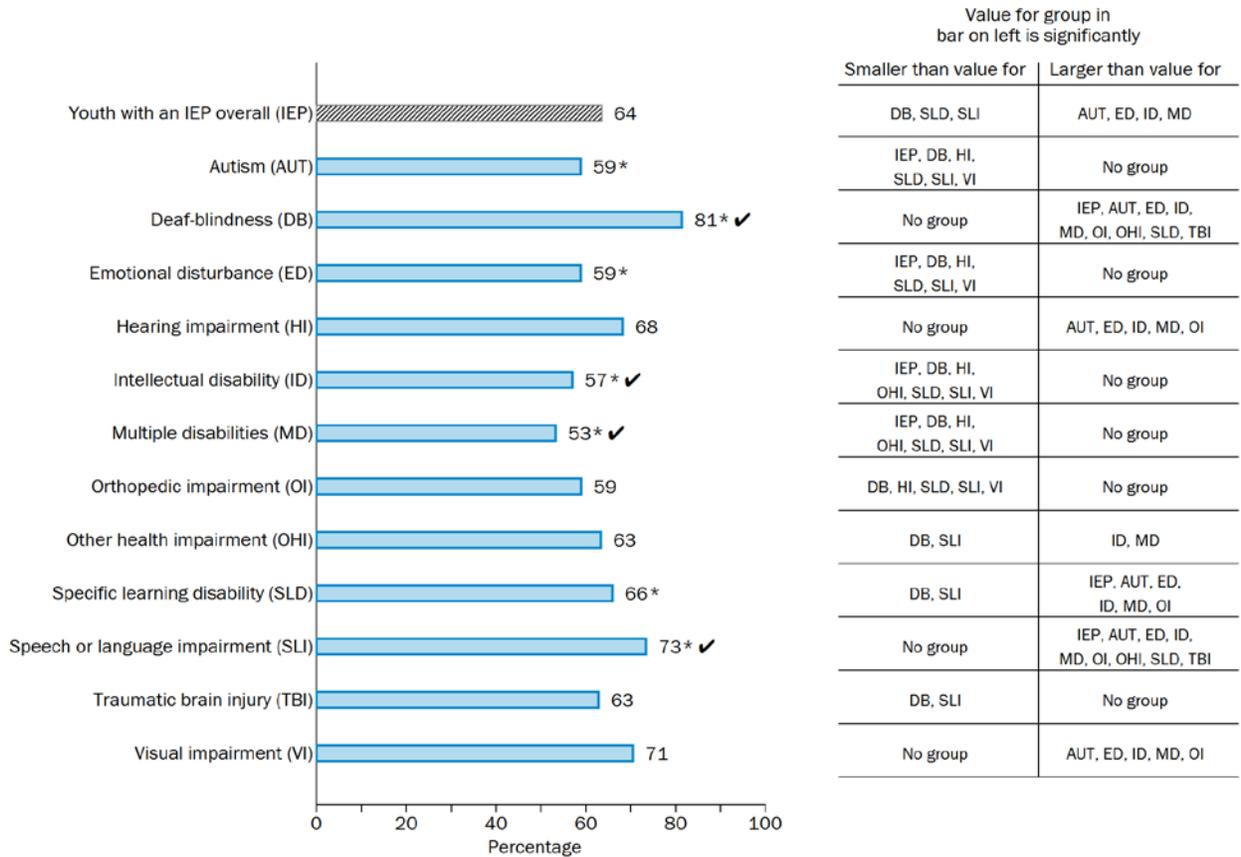
Participating in organized extracurricular activities can enrich students' lives and help them connect with school and friends (Eime, Young, Harvey, Charity, & Payne, 2013). Many schools and community organizations offer youth opportunities to play sports and join clubs to help them build their college résumés and develop their physical abilities, social relationships, and teamwork and leadership skills.<sup>28</sup> Studies have linked participating in extracurricular activities with improved academic performance, educational attainment, and labor market outcomes (Barron, Ewing, & Waddell, 2000; Lipscomb, 2007; Stevenson, 2010). Given the potential benefits of participation and evidence that disability groups over a decade ago had different participation rates (Wagner, Cadwallader, et al., 2003), policymakers have sought to promote greater participation in extracurricular activities among youth with an IEP. Specifically, IDEA 2004's regulations require that those developing IEPs consider whether youth need supplementary aids or services to participate in school activities. While the impact of these policies remains unknown, on average, youth with an IEP do have lower participation rates than their peers in both school-sponsored activities and those organized outside of school (see Volume 1).

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<sup>28</sup> Examples of clubs include those focused on the arts, student government, academic subject matter, community service, or vocational training.

- Nearly two-thirds of youth with an IEP participate in school extracurricular activities, but participation rates for youth with intellectual disability and multiple disabilities are about 10 percentage points lower (figure 18; see table D-24 for more detail). Specifically, 57 percent of youth with intellectual disability and 53 percent of youth with multiple disabilities report participating in a school sport or club during the past year, compared with 64 percent of all youth with an IEP. In contrast, 81 percent of youth with deaf-blindness and 73 percent of youth with speech or language impairments participated in a school sport or club during this period, close to the average rate for their peers without an IEP (81 percent; see Volume 1).

**Figure 18. Percentages of youth who participated in a school sport or club in the past year, by disability group**



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

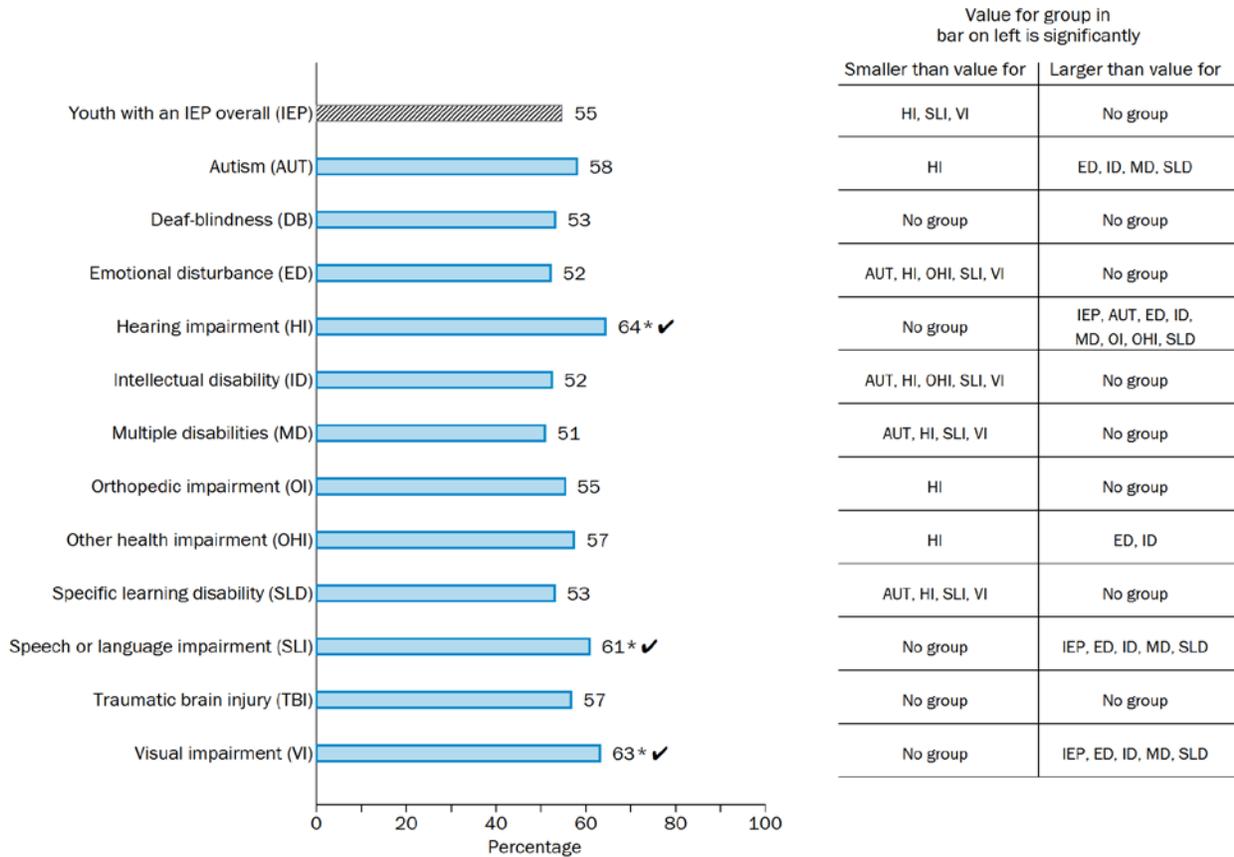
*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*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.

*Source:* National Longitudinal Transition Study 2012. The universe is youth who were not homeschooled. More information is provided in appendix D, table D-24.

- At least half of youth in each disability group also participate in extracurricular activities organized outside of school and three groups have higher participation rates (figure 19; see table D-25 for more detail). Overall, 55 percent of youth with an IEP report participating in at least one of these activities in the past year. The proportions within most disability groups are similar. Three exceptions with higher participation rates are youth with hearing impairments (64 percent), speech or language impairments (61 percent), and visual impairments (63 percent). Joining community sports leagues, theater groups, and activities such as scouting are other chances for youth to develop skills, interests, and social networks outside the classroom.

**Figure 19. Percentages of youth who participated in a sport or club organized outside of school in the past year, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Youth survey respondents were asked whether they had taken 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 non-school activity.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix D, table D-25.

### Youth with emotional disturbance stand out among the disability groups as most likely to be bullied, tardy, suspended, expelled, and arrested

Youth who feel disrespected or less connected to school might have more difficulty seizing opportunities to develop their skills and interests. They may also exhibit more problem behaviors. For example, studies have linked teasing and bullying in high school with lower academic performance and higher dropout rates (Cornell, Gregory, Huang, & Xitao, 2013; Lacey & Cornell, 2013). Policymakers and educators have long been concerned that youth with an IEP may be at greater risk for experiencing bullying and other negative events like being suspended, expelled, or even arrested and, as noted earlier, sought to address these concerns through IDEA 2004 provisions and recent federal guidelines. As reported in Volume 1, overall youth with an IEP are more likely than their peers to experience several forms of bullying, including being teased. They are also at least twice as likely to be suspended, expelled from school, or arrested.

- **Youth in each disability group experience bullying, although these experiences are particularly common for youth with emotional disturbance and other health impairments** (table 16; see tables D-26 to D-31 for more detail). Among all youth with an IEP, 37 percent report being teased or called names during the school year, 27 percent report being made the subject of rumors, 14 percent report being physically attacked or in fights, and 22 percent report having items stolen from them.<sup>29</sup> Each of these bullying experiences is 5 to 11 percentage points more common among youth with emotional disturbance. In addition, above-average proportions of youth with other health impairments report being teased or called names (44 percent) and having rumors spread about them (32 percent). In contrast, youth with orthopedic impairments and visual impairments report the lowest rates of bullying experiences across these indicators.

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<sup>29</sup> Youth were asked in the survey asked about “being attacked or getting into fights.” As a result, it is not possible to determine whether those responding affirmatively were the victim or the aggressor.

**Table 16. Percentages of youth who report types of bullying experiences during the school year, by disability group**

Disability group	Teased or called names at school	Students made up something about me to make others not like me	Physically attacked or in fights at school or on way to or from school	Students said I would not be their friend unless I did something for them	Teased or threatened by email, texts, or other electronic methods	Had items stolen from my locker, desk, or other place at school
<b>Youth with an IEP overall</b>	<b>37</b>	<b>27</b>	<b>14</b>	<b>12</b>	<b>12</b>	<b>22</b>
Autism	41	23*	11*	15	8*	13*✓
Deaf-blindness	23!	26!	‡	‡	‡	18!
Emotional disturbance	48*✓	36*✓	23*✓	14	15	27*✓
Hearing impairment	37	27	10*	12	14	23
Intellectual disability	39	31	13	24*✓	17*	22
Multiple disabilities	36	24	14	13	11	14*✓
Orthopedic impairment	26*✓	17*✓	8!*✓	10	8!	16
Other health impairment	44*✓	32*✓	17*	15*	14	25*
Specific learning disability	34*	24*	13	8*	11	21
Speech or language impairment	31*✓	19*✓	8*✓	9	6*✓	20
Traumatic brain injury	37	24	14	10	8	23
Visual impairment	29	15*✓	8*✓	9!	4!*✓	15*✓

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

Note: Youth survey respondents, excluding proxies, were asked whether any of the types of bullying experiences happened during the school year.

Source: National Longitudinal Transition Study 2012. The universe is youth who were not homeschooled. More information is provided in appendix D, tables D-26 to D-31.

- **Less than a quarter of youth across the disability groups are tardy or skip class at least weekly, but the proportions are largest for youth with emotional disturbance** (table 17; see tables D-32 to D-34 for more detail). Overall, 20 percent of all youth with an IEP report that they arrive late to class each week. In addition, 4 percent skip class and 9 percent are late to school this frequently. Among the disability groups, each of these proportions is highest for youth with emotional disturbance (25, 9, and 15 percent, respectively). Although being late and skipping classes could make it harder for them to learn the material presented in class, it is notable that youth with emotional disturbance are less likely to report that coursework is difficult to learn (see table 14). In contrast, only 13 to 14 percent of youth in four groups—autism, multiple disabilities, speech or language impairments, and visual impairments—arrive at class late at least weekly, matching the proportion for youth without an IEP (see Volume 1).

**Table 17. Percentages of youth who were tardy or skipped class at least weekly during the school year, by disability group**

Disability group	Late for class	Cut or skipped class	Late for school
<b>Youth with an IEP overall</b>	<b>20</b>	<b>4</b>	<b>9</b>
Autism	13*✓	2!*	5*
Deaf-blindness	‡	‡	‡
Emotional disturbance	25*✓	9*	15*✓
Hearing impairment	17	4!	6*
Intellectual disability	17*	4	8
Multiple disabilities	14*✓	4!	6*
Orthopedic impairment	14*✓	‡	7
Other health impairment	24*	3	10
Specific learning disability	20	3	9
Speech or language impairment	14*✓	2*	6*
Traumatic brain injury	21	‡	12!
Visual impairment	13*✓	‡	4!*

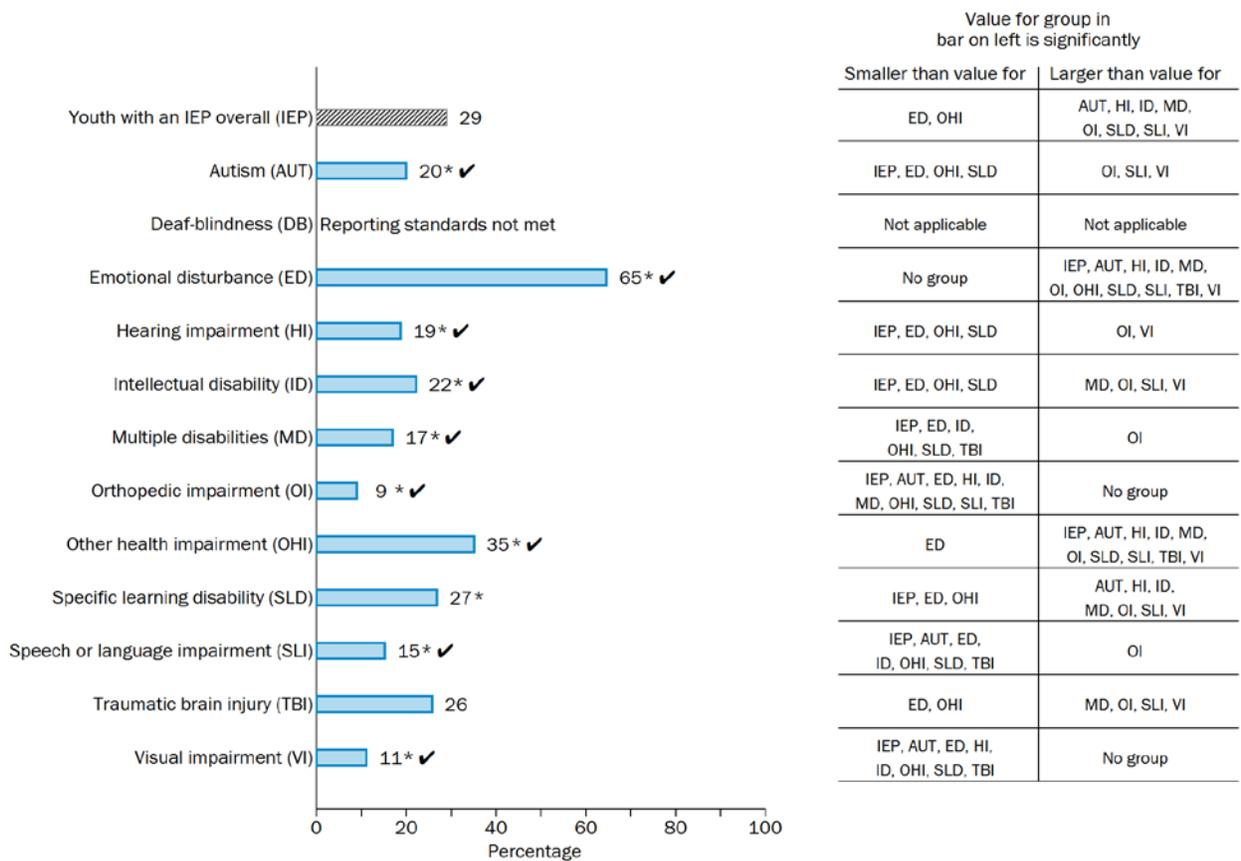
\*= $p < .05$  for comparison with IEP estimate; ✓=comparison is statistically significant and at least 5 percentage points in magnitude; !=interpret data with caution. Estimate is unstable because the standard error represents 30 to 50 percent of the estimate; ‡=reporting standards not met. The standard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

Note: Youth survey respondents, excluding proxies, were asked how often they went to class late, skipped class, and went to school late during the school year. The response categories were every day, almost every day, once a week, a few times, and never. The percentages are for responses of at least once a week.

Source: National Longitudinal Transition Study 2012. The universe is youth who were not homeschooled. More information is provided in appendix D, tables D-32 to D-34.

- Youth with emotional disturbance are more than twice as likely as all youth with an IEP to be suspended or expelled** (figures 20 and 21; see tables D-35 and D-36 for more detail). Specifically, parents report that 65 percent of youth with emotional disturbance have received an out-of-school suspension and 19 percent have been expelled, compared with 29 and 8 percent of youth with an IEP overall. Youth with other health impairments, the group that includes those with attention deficit disorders, are the next most likely group to have been suspended (35 percent). In addition, 16 percent of youth with emotional disturbance and 14 percent of youth with other health impairments report getting into trouble for acting out in class at least once a week, compared with 9 percent of all youth with an IEP (table D-37). The large proportions of youth in these two disability groups experiencing disciplinary actions heighten the importance of the IDEA 2004 performance indicator that requires states to closely monitor how often and why youth are suspended and expelled both for all youth with an IEP and by disability group.

**Figure 20. Percentages of youth who have received an out-of-school suspension, by disability group**



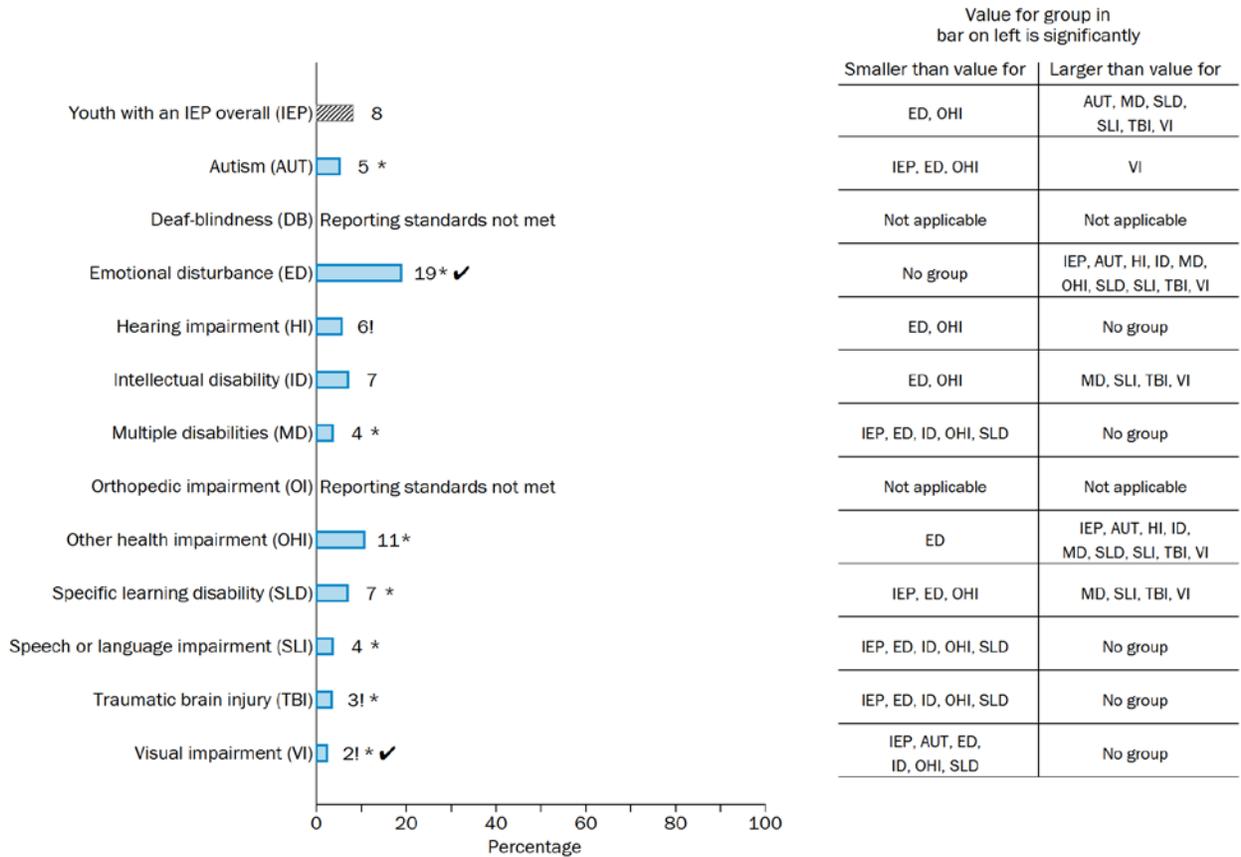
\*= $p < .05$  for comparison with IEP estimate; ✓=comparison is statistically significant and at least 5 percentage points in magnitude; Reporting standards not met=The standard error represents more than 50 percent of the estimate.

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents were asked whether youth has ever had an out-of-school suspension.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix D, table D-35.

**Figure 21. Percentages of youth who have been expelled from school, by disability group**



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

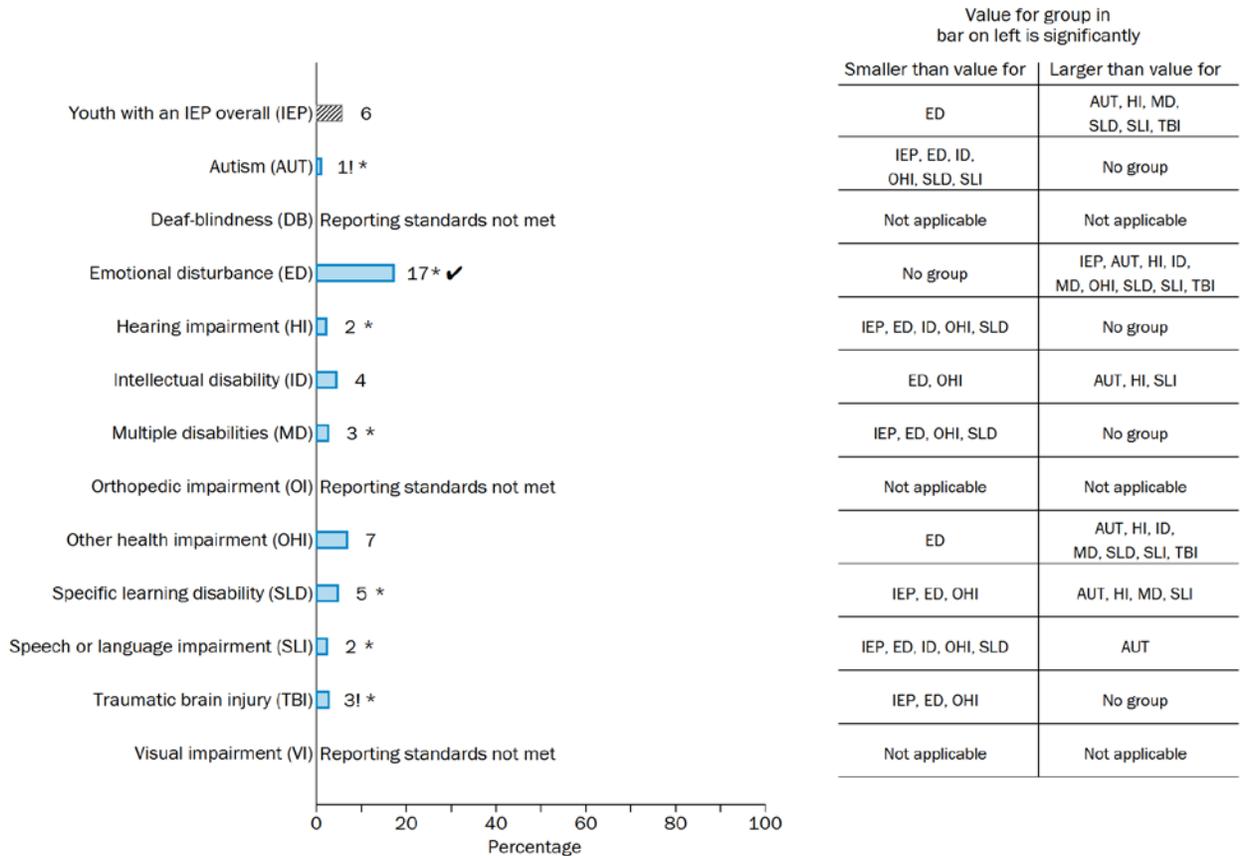
*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents were asked whether youth has ever been expelled from school.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix D, table D-36.

- Youth with emotional disturbance are also nearly three times as likely as youth with an IEP overall to have been arrested in the past two years (figure 22; see table D-38 for more detail). Seventeen percent of youth with emotional disturbance were arrested in the two years prior to the survey, compared with 6 percent of youth with an IEP overall, according to parents. In contrast, at most two percent of youth with autism, hearing impairments, and speech or language impairments were arrested during that two-year period. Arrests, especially those that lead to convictions and a permanent criminal record, are significant negative events for youth. Among other negative consequences, arrests can make it difficult for youth to obtain jobs after leaving high school.

**Figure 22. Percentages of youth who have been arrested in the past two years, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group's bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group's bar and the values for the other groups' bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, "ED" will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, "ID" will appear in the right-hand column. If it is not statistically larger than the value for any other group, "No group" will appear in the right-hand column.

*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.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix D, table D-38.

### Within at least half the disability groups, youth from low-income households and lower-performing schools may be less engaged in school

Youth with an IEP from different backgrounds may have different educational and social experiences even within the same disability group. Comparing groups defined not only by disability but also by demographic and school characteristics provides additional information for determining which youth struggle most to be engaged in school and with friends.<sup>30</sup>

- **Within about half of the disability groups, youth from low-income households are more likely than those from higher-income households to be suspended, or less likely to participate in school sports or clubs** (table 18a, see tables D-39 to D-42 for more detail). Thirty-three percent of all youth with an IEP from low-income households have been suspended according to parents, compared with 24 percent of those from higher-income households. Higher suspension rates for youth in low-income households occur in five disability groups—emotional disturbance, intellectual disability, other health impairments, specific learning disabilities, and speech or language impairments. Overall, low-income youth with an IEP also report lower participation rates in school sports and clubs than do higher-income youth, by 9 percentage points. This difference exists among youth in four of the same five groups (all but emotional disturbance) and two others (autism and orthopedic impairments). Lower income and higher income youth do not differ in terms of their social involvement or teasing experiences.

**Table 18a. Household income groups experiencing greater challenges with engagement, by disability group**

Disability group	Groups more likely to:		Groups less likely to:	
	Receive a suspension (parent reported)	Experience being teased or called names (youth reported)	Participate in school sports and clubs (youth reported)	Get together weekly with friends (youth reported)
<b>Youth with an IEP overall</b>	<b>Low income</b>		<b>Low income</b>	
Autism			Low income	
Deaf-blindness				
Emotional disturbance	Low income			
Hearing impairment				
Intellectual disability	Low income		Low income	
Multiple disabilities			Low income	
Orthopedic impairment			Low income	
Other health impairment	Low income		Low income	
Specific learning disability	Low income		Low income	
Speech or language impairment	Low income		Low income	
Traumatic brain injury				
Visual impairment				

Note: A household income group is identified if it is more likely than the other household income group to have an engagement challenge (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across household income groups that meet this criterion. The groups are youth in low income and higher income households.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix D, tables D-39 to D-42.

<sup>30</sup> As explained previously, the small number of students in some disability groups and with some of these characteristics means that what look like differences between subgroups of students could be due to random chance. For this reason, similar to the rest of the report, two subgroups are considered different on a measure only when the difference is statistically significant and at least five percentage points in size. In addition, the text focuses on describing subgroup differences that exist for all youth with an IEP and at least one disability group.

- **Within most disability groups, Black youth are more likely than youth of other races or ethnicities to be suspended, but they are more likely to exhibit positive engagement in other ways** (table 18b, see tables D-39 to D-42 for more detail). Nearly half (47 percent) of all Black youth with an IEP have been suspended, about double the fraction of Hispanic youth (24 percent) and White, Asian, and other youth (25 percent). Suspension rates are higher among Black youth than at least one of those race or ethnicity groups within 8 disability groups. However, among all youth with an IEP, Black youth are more likely than Hispanic youth to report being involved in school sports and clubs (66 versus 60 percent), and less likely than White, Asian, and other youth to be teased (34 versus 41 percent). The pattern of Hispanic youth having lower participation rates than Black youth in school sports and clubs exists within three disability groups—youth with deaf-blindness, hearing impairments, and speech or language impairments. White, Asian, and other youth are more likely than Black or Hispanic youth to report teasing at school within five disability groups—autism, emotional disturbance, other health impairments, specific learning disabilities, and speech or language impairments. Within a majority of the disability groups, racial and ethnic backgrounds do not differentiate whether students get together with friends weekly.

**Table 18b. Racial and ethnic groups experiencing greater challenges with engagement, by disability group**

Disability group	Groups more likely to:		Groups less likely to:	
	Receive a suspension (parent reported)	Experience being teased or called names (youth reported)	Participate in school sports and clubs (youth reported)	Get together weekly with friends (youth reported)
<b>Youth with an IEP overall</b>	<b>Black</b>	<b>White and other</b>	<b>Hispanic</b>	
Autism	White, Asian, other	Hispanic White, Asian, other		
Deaf-blindness			Hispanic	
Emotional disturbance	Black	White, Asian, other		
Hearing impairment			Hispanic	
Intellectual disability	Black			Hispanic
Multiple disabilities	Black		White, Asian, other	Hispanic
Orthopedic impairment	Black			White, Asian, other
Other health impairment	Black	White, Asian, other		
Specific learning disability	Black	White, Asian, other		
Speech or language impairment	Black	White, Asian, other	Hispanic	
Traumatic brain injury	Black Hispanic			
Visual impairment				

Note: A racial or ethnic group is identified if it is more likely than at least one other racial and ethnic group to have an engagement challenge (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across racial and ethnic groups that meet this criterion. The groups are Black, Hispanic, and a combined group of White, Asian, and other youth.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix D, tables D-39 to D-42.

- **Males in 9 disability groups are more likely than females to be suspended, but in 3 of these groups they are also more likely to get together with friends and less likely to be teased** (table 18c, see tables D-39 to D-42 for more detail). Overall, 35 percent of male youth with an IEP have been suspended according to parents, more than twice the proportion of females (16 percent). This pattern of greater male suspension rates occurs within all disability groups except for youth with deaf-blindness, traumatic brain injuries, and visual impairments. However, females are less likely than males to report getting together with their friends weekly (46 versus 55 percent), and more likely to be teased at school (43 versus 34 percent). These latter two patterns exist among youth with hearing impairments, other health impairments, and specific learning disabilities. No differences between males and females are apparent within any of the disability groups in terms of their participation rates in school sports and clubs.

**Table 18c. Gender groups experiencing greater challenges with engagement, by disability group**

Disability group	Groups more likely to:		Groups less likely to:	
	Receive a Suspension (parent reported)	Experience being teased or called names (youth reported)	Participate in school sports and clubs (youth reported)	Get together weekly with friends (youth reported)
<b>Youth with an IEP overall</b>	<b>Male</b>	<b>Female</b>		<b>Female</b>
Autism	Male			
Deaf-blindness				
Emotional disturbance	Male			
Hearing impairment	Male	Female		Female
Intellectual disability	Male			
Multiple disabilities	Male			
Orthopedic impairment	Male			
Other health impairment	Male	Female		Female
Specific learning disability	Male	Female		Female
Speech or language impairment	Male			
Traumatic brain injury				
Visual impairment				

Note: A gender group is identified if it is more likely than the other gender group to have an engagement challenge (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across gender groups that meet this criterion. The groups are female and male youth.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix D, tables D-39 to D-42.

- **In some disability groups youth over 18 are less involved than younger students in sports and clubs and with friends, but younger students are more likely to be suspended and teased** (table 18d, see tables D-43 to D-46 for more detail). Among all youth with an IEP, the oldest (those ages 19 or older and still in school) are 8 percentage points less likely than those ages 15 to 18 to report participating in a school sport or club (55 versus 63 percent) and 11 percentage points less likely to get together with friends weekly (44 versus 55 percent). However, on average, parents say that youth with an IEP ages 15 to 18 are more likely to be suspended than either the oldest or the youngest (ages 14 or younger) youth. In addition, the youngest are most likely to experience being teased at school, compared with the other age groups. These patterns occur in the following specific disability groups:
  - **Youth ages 19 or older with emotional disturbance, hearing impairments, and multiple disabilities are less likely to participate in school-based extracurricular activities than are younger youth.** The oldest youth with multiple disabilities are also less likely to report getting together with friends each week than are younger youth.

- **Within 3 disability groups, youth ages 15 to 18 are more likely to be suspended than youth of other ages.** Higher suspension rates for 15 to 18 year olds exist among youth with emotional disturbance, intellectual disability, and speech or language impairments. Youth ages 15 to 18 with specific learning disabilities are also more likely to report being teased than older youth.
- **In 8 disability groups, the youngest youth are either less likely to get together with friends or more likely to be teased in school.** Both of these patterns exist among youth with emotional disturbance, other health impairments, and specific learning disabilities. In addition, the youngest youth with traumatic brain injuries are also less likely than older youth in the same disability group to get together weekly with friends. The youngest youth with autism, intellectual disability, multiple disabilities, and speech or language impairments are more likely than older youth to report being teased.

**Table 18d. Age groups experiencing greater challenges with engagement, by disability group**

Disability group	Groups more likely to:		Groups less likely to:	
	Receive a suspension (parent reported)	Experience being teased or called names (youth reported)	Participate in school sports and clubs (youth reported)	Get together weekly with friends (youth reported)
<b>Youth with an IEP overall</b>	<b>15 to 18</b>	<b>14 or younger</b>	<b>19 or older</b>	<b>14 or younger</b> <b>19 or older</b>
Autism		14 or younger		
Deaf-blindness				
Emotional disturbance	15 to 18	14 or younger	15 to 18 19 or older	14 or younger
Hearing impairment			15 to 18 19 or older	
Intellectual disability	15 to 18	14 or younger 15 to 18		
Multiple disabilities		14 or younger	19 or older	19 or older
Orthopedic impairment				
Other health impairment		14 or younger 15 to 18		14 or younger
Specific learning disability		14 or younger		14 or younger
Speech or language impairment	15 to 18	14 or younger		
Traumatic brain injury				14 or younger
Visual impairment				15 to 18

Note: An age group is identified if it is more likely than at least one other age group to have an engagement challenge (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across age groups that meet this criterion. The groups are youth who are 14 years old or younger, 15 to 18 years old, and 19 years old or older.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix D, tables D-43 to D-46.

- **Within several disability groups, youth with lower functional abilities are less likely than those with higher functional abilities to participate in sports and clubs and get together with friends** (table 18e, see tables D-43 to D-46 for more detail). Overall, youth with an IEP who have lower functional abilities are 9 percentage points less likely to report participating in a school sport or club (58 versus 67 percent) and 14 percentage points less likely to report getting together with friends weekly (43 versus 57 percent). This difference in school sport and club participation also exists within three groups—multiple disabilities, specific learning disabilities, and speech or language impairments. In terms of getting together with friends, the difference between lower and higher functional ability youth occurs in half the disability groups. These groups include youth with emotional disturbance, intellectual disability, multiple disabilities, other health impairments, specific learning disabilities, and traumatic brain injuries. No overall differences exist in suspensions and teasing by functional ability level. However, youth with higher functional abilities are more likely to be suspended according to parents in three groups—emotional disturbance, intellectual disability, and multiple disabilities. And within one group, youth with hearing impairments, those with lower functional abilities are more likely to be teased at school.

**Table 18e. Functional abilities groups (higher or lower) experiencing greater challenges with engagement, by disability group**

Disability group	Groups more likely to:		Groups less likely to:	
	Receive a Suspension (parent reported)	Experience being teased or called names (youth reported)	Participate in school sports and clubs (youth reported)	Get together weekly with friends (youth reported)
<b>Youth with an IEP overall</b>			<b>Lower</b>	<b>Lower</b>
Autism				
Deaf-blindness				
Emotional disturbance	Higher			Lower
Hearing impairment		Lower		
Intellectual disability	Higher			Lower
Multiple disabilities	Higher		Lower	Lower
Orthopedic impairment				
Other health impairment				Lower
Specific learning disability			Lower	Lower
Speech or language impairment			Lower	
Traumatic brain injury				Lower
Visual impairment				

Note: A functional abilities index group is identified if it is more likely than the other functional abilities index group to have an engagement challenge (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across functional abilities index groups that meet this criterion. The groups are youth with lower and higher functional abilities index scores.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix D, tables D-43 to D-46.

- **Where differences by school performance within the disability groups exist, they favor youth from higher-performing schools** (table 18f, see tables D-47 to D-50 for more detail). On average, parents report that suspensions are 11 percentage points more likely among youth with an IEP attending lower-performing schools than among those in higher-performing schools. Six disability groups share this pattern—youth with emotional disturbance, intellectual disability, multiple disabilities, other health impairments, specific learning disabilities, and visual impairments. In addition, among youth with autism, 48 percent in lower-performing schools report participating in school sports and clubs, compared with 62 percent in higher-performing schools. No differences between youth attending lower-performing and higher-performing schools exist in terms of their reported social involvement with friends. In addition, only among youth with hearing impairments is there a difference in the proportion of youth experiencing teasing between those in lower-performing and higher-performing schools.

**Table 18f. School academic performance groups (higher or lower performing) experiencing greater challenges with engagement, by disability group**

Disability group	Groups more likely to:		Groups less likely to:	
	Receive a suspension (parent reported)	Experience being teased or called names (youth reported)	Participate in school sports and clubs (youth reported)	Get together weekly with friends (youth reported)
<b>Youth with an IEP overall</b>	<b>Lower performing</b>		<b>Lower performing</b>	
Autism			Lower performing	
Deaf-blindness				
Emotional disturbance	Lower performing			
Hearing impairment		Lower performing		
Intellectual disability	Lower performing			
Multiple disabilities	Lower performing			
Orthopedic impairment	No data			
Other health impairment	Lower performing			
Specific learning disability	Lower performing			
Speech or language impairment				
Traumatic brain injury				
Visual impairment	Lower performing			

Note: A school academic performance group is identified if it is more likely than the other school academic performance group to have an engagement challenge (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across school academic performance groups that meet this criterion. The groups are youth in lower performing and higher performing schools.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix D, tables D-47 to D-50.

- **Engagement appears to vary by locale within most disability groups, with youth from cities having higher suspension rates but youth from towns more likely to experience bullying** (table 18g, see tables D-47 to D-50 for more detail). Among all youth with an IEP, students in cities are 9 percentage points more likely than those in suburbs and towns/rural areas to be suspended. This is true for youth in five groups as well—emotional disturbance, intellectual disability, other health impairments, specific learning disabilities, and speech or language impairments. However, students in towns and rural areas are 8 percentage points more likely than those in cities to report being teased. This latter pattern is true for those with autism, emotional disturbance, and other health impairments. Few disability groups have differences by school locale for participation in school activities or spending time with friends.

**Table 18g. School locale groups experiencing greater challenges with engagement, by disability group**

Disability group	Groups more likely to:		Groups less likely to:	
	Receive a Suspension (parent reported)	Experience being teased or called names (youth reported)	Participate in school sports and clubs (youth reported)	Get together weekly with friends (youth reported)
<b>Youth with an IEP overall</b>	<b>City</b>	<b>Town or rural</b>		
Autism		Town or rural		
Deaf-blindness				City Town or rural
Emotional disturbance	City	Town or rural		
Hearing impairment				
Intellectual disability	City			
Multiple disabilities				
Orthopedic impairment	Town or rural		City	
Other health impairment	City	Town or rural		City
Specific learning disability	City			
Speech or language impairment	City			
Traumatic brain injury				Town or rural
Visual impairment				

Note: A school locale group is identified if it is more likely than at least one other school locale group to have an engagement challenge (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across school locale groups that meet this criterion. The groups are youth attending school in a city, suburb, or town or rural area.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix D, tables D-47 to D-50.

- Within four disability groups, youth in schools with larger special education populations are more likely to be suspended than youth in schools with proportionately fewer special education students (table 18h, see tables D-47 to D-50 for more detail). Students with multiple disabilities, other health impairment, specific learning disabilities, and visual impairments are 7 to 17 percent more likely to be suspended according to parents if they attend schools with larger, as opposed to smaller, shares of special education students. No overall differences by special education population size exist in club and sport participation, time spent with friends, or teasing at school (and few differences in these indicators within individual disability groups).

**Table 18h. School special education size groups experiencing greater challenges with engagement, by disability group**

Disability group	Groups more likely to:		Groups less likely to:	
	Receive a Suspension (parent reported)	Experience being teased or called names (youth reported)	Participate in school sports and clubs (youth reported)	Get together weekly with friends (youth reported)
<b>Youth with an IEP overall</b>	<b>Larger share IEP</b>			
Autism				
Deaf-blindness				
Emotional disturbance				
Hearing impairment				
Intellectual disability				Smaller share IEP
Multiple disabilities	Larger share IEP			
Orthopedic impairment				
Other health impairment	Larger share IEP	Larger share IEP		
Specific learning disability	Larger share IEP			
Speech or language impairment				
Traumatic brain injury				
Visual impairment	Larger share IEP			

Note: A school special education size group is identified if it is more likely than another school special education size group to have an engagement challenge (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across school special education size groups that meet this criterion. The groups are youth in schools with smaller and larger shares of students with an IEP.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix D, tables D-47 to D-50.

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## **Chapter 5. What academic and special education supports do youth receive?**

Schools and families play vital roles in supporting students' educational needs, and this support may be particularly important for youth in special education (Mazzotti et al., 2016; Test et al., 2009; Wagner et al., 2014). The Individuals with Disabilities Education Act (IDEA) of 2004 envisions that schools and families will work together to develop individualized education programs (IEPs) meet youths' particular educational needs and help them prepare for adult life. Schools are expected to provide appropriate academic programs and related services in accordance with IEP provisions. This could involve providing various accommodations; modifications to the curriculum; and supplementary academic, therapeutic, or transportation services. The specific types of services and supports that students receive might vary across the disability groups because they are supposed to reflect their needs.

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### **Key findings in chapter 5**

- **At least half of youth in every disability group receive some accommodations and special services, but modified tests and assignments are the norm only for those with autism, intellectual disability, and multiple disabilities.** Most youth in each disability group except for speech or language impairments receive extra time to take tests, according to parents. Extra time is most common among those with other health impairments (82 percent), the group that typically includes youth with attention deficit disorders. Most youth in three groups—autism, intellectual disability, and multiple disabilities—take modified tests (63 to 67 percent) and receive modified assignments (54 to 63 percent). Although most youth in all but two groups receive at least one therapeutic service, receipt varies greatly (from 30 percent of those with specific learning disabilities to 87 percent of those with deaf-blindness).
  - **Youth with autism, intellectual disability, and multiple disabilities—the groups most likely to have modified tests and assignments—are the least likely to receive school-provided supplemental academic instruction and course guidance.** Overall, 72 percent of youth with an IEP in high school indicate receiving school-provided academic instruction outside of regular school hours, but the proportions are lower for youth with autism, intellectual disability, and multiple disabilities (47 to 56 percent). Youth in these three groups also less commonly report receiving guidance on courses to take in high school (59 to 66 percent) than do youth with an IEP overall (73 percent).
  - **Most parents of youth in each disability group attend IEP meetings and parent-teacher conferences, but parents in some groups are less likely to help with homework or attend school events.** More than three-quarters of parents in each group reporting attending an IEP meeting (83 to 95 percent) and a parent-teacher conference (77 to 87 percent). In contrast, smaller shares of parents of youth with an IEP report helping their children with homework weekly and attending a school event (62 and 58 percent overall). Youth with autism, emotional disturbances, and multiple disabilities are less likely than youth with an IEP on average to have their parents help them with homework (54 percent for each group). Youth with emotional disturbance and intellectual disability are less likely than youth with an IEP overall to have their parents attend a school event (46 to 47 percent versus 58 percent).
  - **Within most disability groups, receipt of supplemental academic supports in school and at home does not vary by household income, but Black youth are more likely than other youth to receive these supports.** Black youth are more likely than other youth to receive school-based supplemental academic support within three disability groups: autism, deaf-blindness, and visual impairments. They are more likely to receive homework help within seven disability groups.
-

Parents can offer other education supports to their children at home and by participating in school activities. The importance of parent engagement in the learning process is reflected in IDEA 2004 through an indicator requiring states to track the extent to which parents report that schools facilitate their involvement in their children's education. But studies of youth with an IEP a decade ago indicated that some kinds of school and parental help are less common for youth with certain disabilities (Newman, 2005; Wagner, Newman, Cameto, Levine, & Marder, 2003). Clarifying whether, how, and for whom these differences exist currently could help to refine technical assistance at the federal, state, and local levels.

The sources of the key information in this chapter are as follows:

- *Receipt of accommodations, modifications, and therapeutic services*: youth survey
- *Receipt of supplemental academic instruction and course guidance*: parent and youth surveys
- *Parental participation in school meetings and events, and provision of homework help*: parent survey
- *Subgroup differences in the receipt of academic supports*: parent and youth surveys

Detailed tables supporting the findings presented in this chapter are available in [appendix E](#).

### **At least half of youth in every disability group receive some accommodations or special services, but modified tests and assignments are the norm only for those with autism, intellectual disability, and multiple disabilities**

Under IDEA 2004, schools must provide appropriate accommodations, modifications to the curriculum, and therapeutic services to youth in special education to meet their academic and functional needs. Examples of accommodations include additional time to complete assignments and tests, and other instructional supports. Modifications typically include substantive changes to assignments and tests.<sup>31</sup> Therapeutic services include a variety of services to address specific disability-related needs, including psychological counseling, speech and language therapy, physical therapy, and others. Schools can also provide special transportation to help students travel to and from school. In the aggregate, schools make a substantial investment in these services, accounting for about a quarter of all special education expenditures (Chambers, Parrish, & Harr, 2004).

As discussed in chapter 3, students' abilities and challenges vary considerably by disability group, suggesting that their service needs do as well. Research on youth a decade ago found large differences across disability groups in the services and supports they received, consistent with variation in need (Levine, Marder, & Wagner, 2004). In addition, academic abilities also varied across disability groups; the lowest average levels of achievement were found for those with autism, deaf-blindness, intellectual disability, and multiple disabilities (Wagner et al., 2006). Although it is not possible to use the survey data to discern whether schools are adequately addressing needs in each group, examining the use of accommodations, modifications, and services indicates needs that are currently perceived and addressed by school staff.

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<sup>31</sup> Under the No Child Left Behind Act, for the purpose of measuring schools' adequate yearly progress, states could use alternate assessments based on alternate achievement standards for youth with the most significant cognitive disabilities, but could only count up to one percent of the total student population as being proficient on that measure.

- **Currently, most youth in nearly all disability groups receive extra time to complete tests and assignments, and many receive other accommodations** (table 19; see tables E-1 to E-5 for more detail).<sup>32</sup> Overall, 72 percent of youth with IEP receive extra time on tests according to parents, although this varies by disability group from 46 percent of those with speech or language impairments to 82 percent of those with other health impairments. Youth with other health impairments include those diagnosed with attention deficit disorders, which can lead to difficulty focusing (U.S. Department of Education, 2002). Two-thirds of all youth with an IEP receive extra time on assignments, with the same groups above or below this average. In several disability groups, youth are at least 10 percentage points more likely than youth with an IEP overall to receive accommodations involving specific equipment or materials. For example, 41 to 45 percent of youth in three groups—intellectual disability, orthopedic impairments, and visual impairments—can use computers or calculators for tasks that other students perform without these devices, compared with 31 percent of all youth with an IEP. Smaller proportions of youth with hearing impairments (24 percent) and speech or language impairments (14 percent) can use computers or calculators for these purposes.

**Table 19. Percentages of youth who received accommodations in the past year, by disability group**

Disability group	Received additional time to take tests	Received additional time to complete assignments	Used a computer or calculator when others did not	Used books in an alternate format	Assistance from a reader or interpreter
<b>Youth with an IEP overall</b>	<b>72</b>	<b>66</b>	<b>31</b>	<b>13</b>	<b>12</b>
Autism	70	68	35*	15	12
Deaf-blindness	53*✓	47*✓	38	28*✓	50*✓
Emotional disturbance	65*✓	67	31	10*	6*✓
Hearing impairment	63*✓	54*✓	24*✓	9*	31*✓
Intellectual disability	63*✓	66	45*✓	23*✓	18*✓
Multiple disabilities	58*✓	60*✓	38*✓	25*✓	19*✓
Orthopedic impairment	69	59*✓	42*✓	22*✓	14
Other health impairment	82*✓	76*✓	32	10*	9*
Specific learning disability	75*	65	28*	10*	12
Speech or language impairment	46*✓	42*✓	14*✓	7*✓	5*✓
Traumatic brain injury	69	66	34	18	11
Visual impairment	77	63	41*✓	74*✓	14

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

Note: Parent survey respondents were asked to indicate whether in the past 12 months youth received more time in taking tests; additional time to complete assignments; use of a computer or calculator for activities not allowed other students; books on tape, CD, in Braille, large print, or in another alternate format; or assistance from a reader or interpreter, including for sign language.

Source: National Longitudinal Transition Study 2012. The universe is youth whose parents reported that they ever had a disability or a Section 504 plan. More information is provided in appendix E, tables E-1 to E-5.

<sup>32</sup> In this section of chapter 5, data come from parents of youth with an IEP (according to the school district) who reported in the parent survey that their children have had a disability.

- **Substantively modified tests and assignments are less common than extra time to complete the regular versions, but they are the norm for youth with autism, intellectual disability, and multiple disabilities** (table 20; see tables E-6 and E-7 for more detail). Smaller proportions of youth with an IEP receive modified or alternate assessments (52 percent) and modified assignments (41 percent) than extra time on tests and assignments (72 and 66 percent, see table 19), according to parents.<sup>33</sup> Youth with autism, intellectual disability, and multiple disabilities are more likely than youth with an IEP overall to take modified or alternate tests (63 to 67 percent) and to complete modified assignments (54 to 63 percent). Substantive modifications are intended to account for the particular academic needs of youth in groups such as these three, which historically have had lower average test scores than other disability groups as indicated above (Wagner et al., 2006). Most youth with visual impairments also take modified or alternate tests (61 percent), potentially reflecting a change in test format.

**Table 20. Percentages of youth who received modified tests and assignments in the past year, by disability group**

Disability group	Received modified or alternate tests or assessments	Received shorter or different assignments
<b>Youth with an IEP overall</b>	<b>52</b>	<b>41</b>
Autism	63*✓	54*✓
Deaf-blindness	51	33
Emotional disturbance	46*✓	39
Hearing impairment	46*✓	27*✓
Intellectual disability	67*✓	63*✓
Multiple disabilities	63*✓	55*✓
Orthopedic impairment	50	41
Other health impairment	55	40
Specific learning disability	49*	36*
Speech or language impairment	29*✓	23*✓
Traumatic brain injury	53	43
Visual impairment	61*✓	34

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

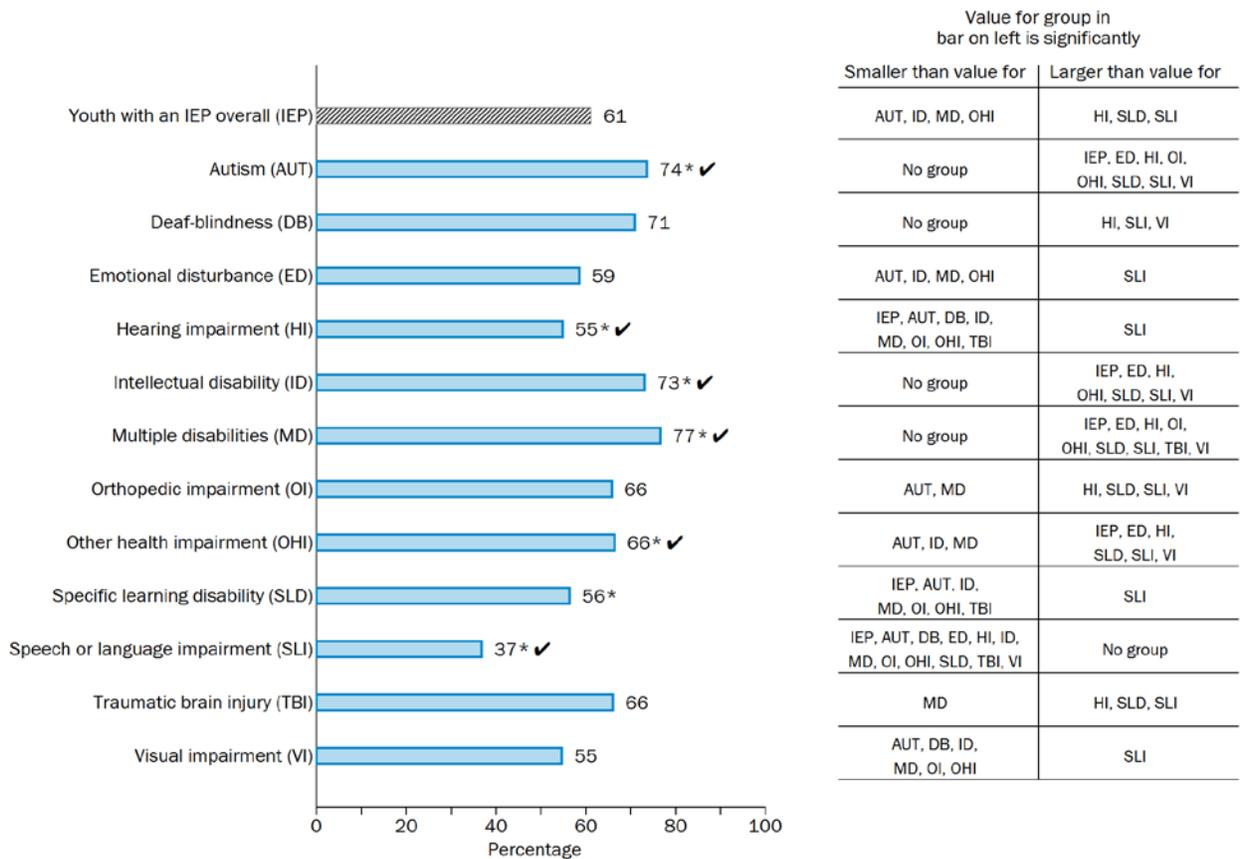
Note: Parent survey respondents were asked to indicate whether in the past 12 months youth received each type of modification.

Source: National Longitudinal Transition Study 2012. The universe is youth whose parents reported that they ever had a disability or a Section 504 plan. More information is provided in appendix E, tables E-6 and E-7.

<sup>33</sup> The modified assessments might be state accountability tests, but they could also include other assessments that teachers administer because parents are not always able to distinguish between types of assessments.

- More than half of youth in nearly every disability group receive support from classroom aides, and this is most common in the same three groups that tend to receive modified assignments (figure 23; see table E-9 for more detail). According to parents, most youth in all but one disability group receive support from a teacher’s aide, instructional assistant, or personal aide. The exception is youth with speech or language impairments, only 37 percent of whom had an aide in the past year. The three groups most likely to receive support from aides are youth with autism, intellectual disability, and multiple disabilities (73 to 77 percent). Some youth in these groups might require aides for the same reasons they need modified tests and assignments—to provide more individualized assessment and instruction. In addition, aides can help youth address behavior issues or get to their next class.

**Figure 23. Percentages of youth who received assistance from an aide in the past year, by disability group**



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

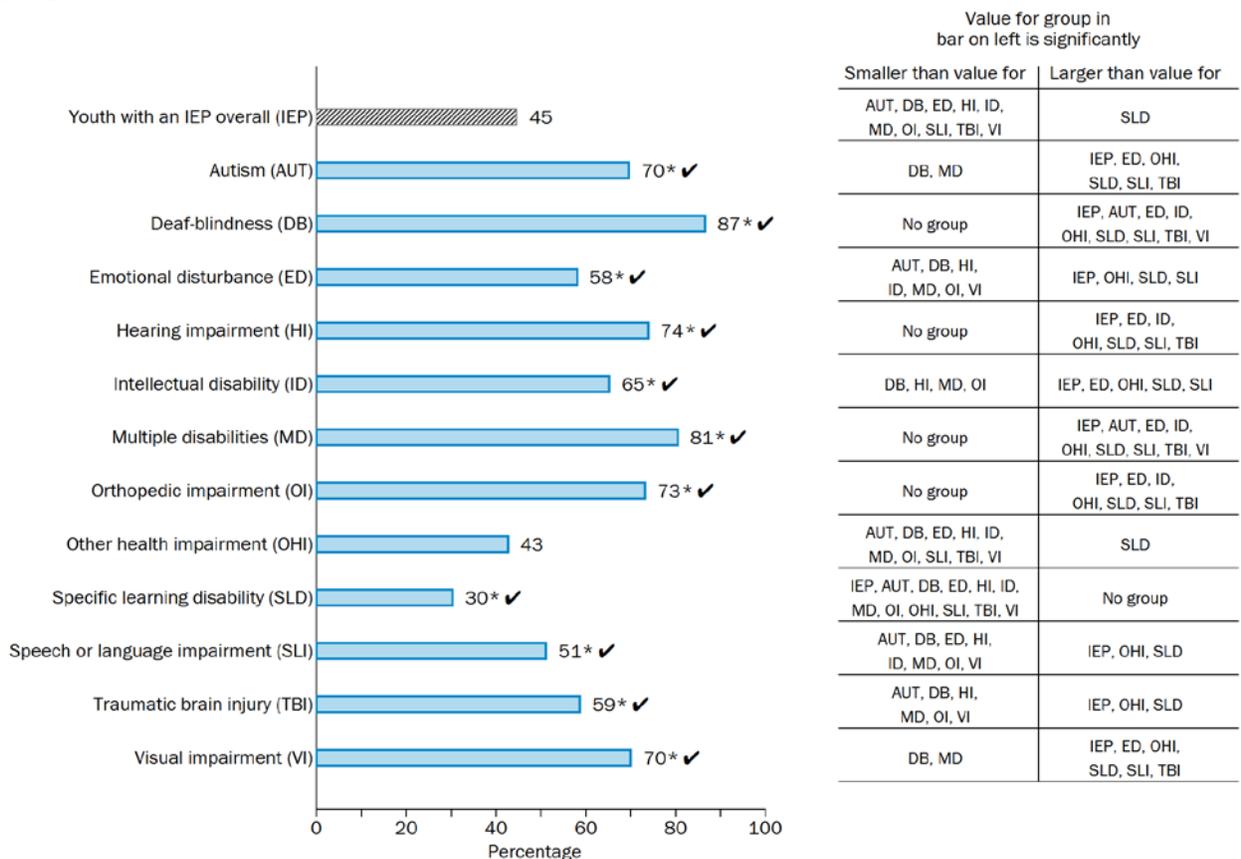
*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents were asked whether youth received assistance from a teacher’s aide, instructional assistant, or other personal aide or assistant in the past 12 months.

*Source:* National Longitudinal Transition Study 2012. The universe is youth whose parents reported that they ever had a disability or a Section 504 plan. More information is provided in appendix E, table E-9.

- **Although most youth in all but two disability groups receive some therapeutic service, the extent of receipt of these services varies across the groups** (figure 24 and table 21; see tables E-10 to E-18 for more detail). Overall, 45 percent of youth with an IEP received at least one of seven types of therapeutic services in the past year according to parents—psychological or mental health counseling or services; speech and language therapy, or communication services; physical or occupational therapy; nursing care; orientation and mobility services; audiology services for hearing problems; and vision services, such as Braille instruction. Receipt of at least one these services varies, ranging from 30 percent of those with specific learning disabilities to 87 percent of those with deaf-blindness. Among specific types of therapeutic services, psychological or mental health counseling is received by the largest proportion of youth with an IEP overall (26 percent), with rates of receipt ranging from 13 percent of those with speech or language impairments to 54 percent of youth with emotional disturbance. The next-most common service is speech and language therapy, which 23 percent of all youth with an IEP receive, as well as 34 to 74 percent in seven groups—traumatic brain injuries, hearing impairments, speech or language impairments, intellectual disability, autism, multiple disabilities, and deaf-blindness. Smaller proportions of youth with an IEP on average use physical therapy, nursing care, orientation and mobility services, audiology services, and vision services (2 to 9 percent). Similarly, a small percentage of youth with an IEP overall (13 percent) use special transportation, another service schools can offer to youth with an IEP.

**Figure 24. Percentages of youth who received any therapeutic services in the past year, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents were asked whether youth received the following special education services in the past 12 months: psychological or mental health counseling or services; speech and language therapy, or communication services; physical or occupational therapy; nursing care; orientation and mobility services; audiology services for hearing problems; and vision services, such as Braille instruction. The percentages in the figure are for receiving at least one of the services.

*Source:* National Longitudinal Transition Study 2012. The universe is youth whose parents reported that they ever had a disability or a Section 504 plan. More information is provided in appendix E, table E-10.

**Table 21. Percentages of youth who received specific therapeutic and transportation services in the past year, by disability group**

Disability group	Psychological or mental health counseling	Speech and language therapy	Physical therapy	Nursing care	Orientation and mobility services	Audiology services	Vision services	Special transportation services
<b>Youth with an IEP overall</b>	<b>26</b>	<b>23</b>	<b>9</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>13</b>
Autism	35*✓	56*✓	28*✓	7*	6*	3	2	35*✓
Deaf-blindness	19!	74*✓	31*✓	18!*✓	27*✓	57*✓	29*✓	45*✓
Emotional disturbance	54*✓	12*✓	4*	5	2*	1*	1!*	18*✓
Hearing impairment	19*✓	45*✓	9	5	6	59*✓	5*	17*
Intellectual disability	31*	49*✓	25*✓	8*	11*✓	6*	5*	35*✓
Multiple disabilities	31*	62*✓	49*✓	21*✓	19*✓	7*	6*	51*✓
Orthopedic impairment	21*✓	30	53*✓	23*✓	24*✓	4!	3	46*✓
Other health impairment	32*✓	13*✓	5*	4	2*	2*	1!*	7*✓
Specific learning disability	18*✓	14*✓	3*✓	3*	1*	2*	2*	3*✓
Speech or language impairment	13*✓	46*✓	3*✓	3*	2*	2	1!*	3*✓
Traumatic brain injury	35*✓	34*✓	27*✓	11*✓	13*✓	‡	7!*	20*✓
Visual impairment	17*✓	12*✓	15	9	47*✓	2!	48*✓	28*✓

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

Note: Parent survey respondents were asked whether youth received the following special education services in the past 12 months: psychological or mental health counseling or services; speech and language therapy, or communication services; physical or occupational therapy; nursing care; orientation and mobility services; audiology services for hearing problems; vision services, such as Braille instruction; and special transportation because of disability.

Source: National Longitudinal Transition Study 2012. The universe is youth whose parents reported that they ever had a disability or a Section 504 plan. More information is provided in appendix E, tables E-11 to E-18.

### Youth with autism, intellectual disability, and multiple disabilities—the disability groups most likely to receive modified tests and assignments—are the least likely to receive school-provided supplemental academic instruction and course guidance

Both the 1997 and 2004 updates to IDEA increased the emphasis on improving the academic achievement of youth in special education. Schools provide many forms of academic support to students who have low levels of academic achievement, including supplemental instruction outside of the regular school day, extra catch-up courses during school hours, and tutoring. Some studies of youth suggest that supplementary academic help may improve achievement (Black, Doolittle, Zhu, Unterman, & Grossman, 2008; Somers et al., 2010; Springer, Pepper, & Ghosh-Dastidar, 2014). School staff can also provide advice on courses to take during high school, guidance that can benefit any student, regardless of his or her level of academic achievement. Overall, high school youth with an IEP are less likely than their peers to receive supplemental instruction from school staff outside of regular hours (72 versus 78 percent) and guidance on classes (73 versus 82 percent), but they are just as likely to take catch-up courses (see Volume 1).

- **Youth with autism, intellectual disability, and multiple disabilities are less likely than youth with an IEP overall to receive supplemental academic instruction and course guidance from schools** (table 22; see tables E-19 and E-20 for more detail). Nearly three-quarters of all youth with an IEP in high school (72 percent) say that school staff gave them extra academic help before or after school or on weekends during the school year. However, the proportions are more than 15 percentage points lower for youth with autism, intellectual disability, and multiple disabilities (47 to 56 percent) and 6 percentage points lower for youth with emotional disturbance (62 percent).<sup>34</sup> The lower rate for youth with emotional disturbance may be particularly important in light of recent findings that they have a higher risk of dropping out of school than youth in other disability groups (Zablocki & Krezmien, 2012). Below-average proportions of youth in the first three groups and another, youth with orthopedic impairments, also report receiving guidance on courses to take in high school. As noted in chapter 4, youth with intellectual disability are among the most likely to report struggling academically, which suggests they may have greater need for academic support. It is unclear whether the lower rates at which youth in some disability groups report receiving these supports is related to their limited availability in their school, inadequate accommodations, or families' decisions to not make use of these services.

**Table 22. Percentages of youth who received types of school-based academic support during the school year, by disability group**

Disability group	Academic help outside regular school hours	Guidance on courses to take in high school
<b>Youth with an IEP overall</b>	<b>72</b>	<b>73</b>
Autism	56*✓	66*✓
Deaf-blindness	74	71
Emotional disturbance	66*✓	71
Hearing impairment	75	77
Intellectual disability	52*✓	60*✓
Multiple disabilities	47*✓	59*✓
Orthopedic impairment	66	64*✓
Other health impairment	79*✓	77*
Specific learning disability	76*	75
Speech or language impairment	73	80*✓
Traumatic brain injury	77	78
Visual impairment	72	81*✓

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

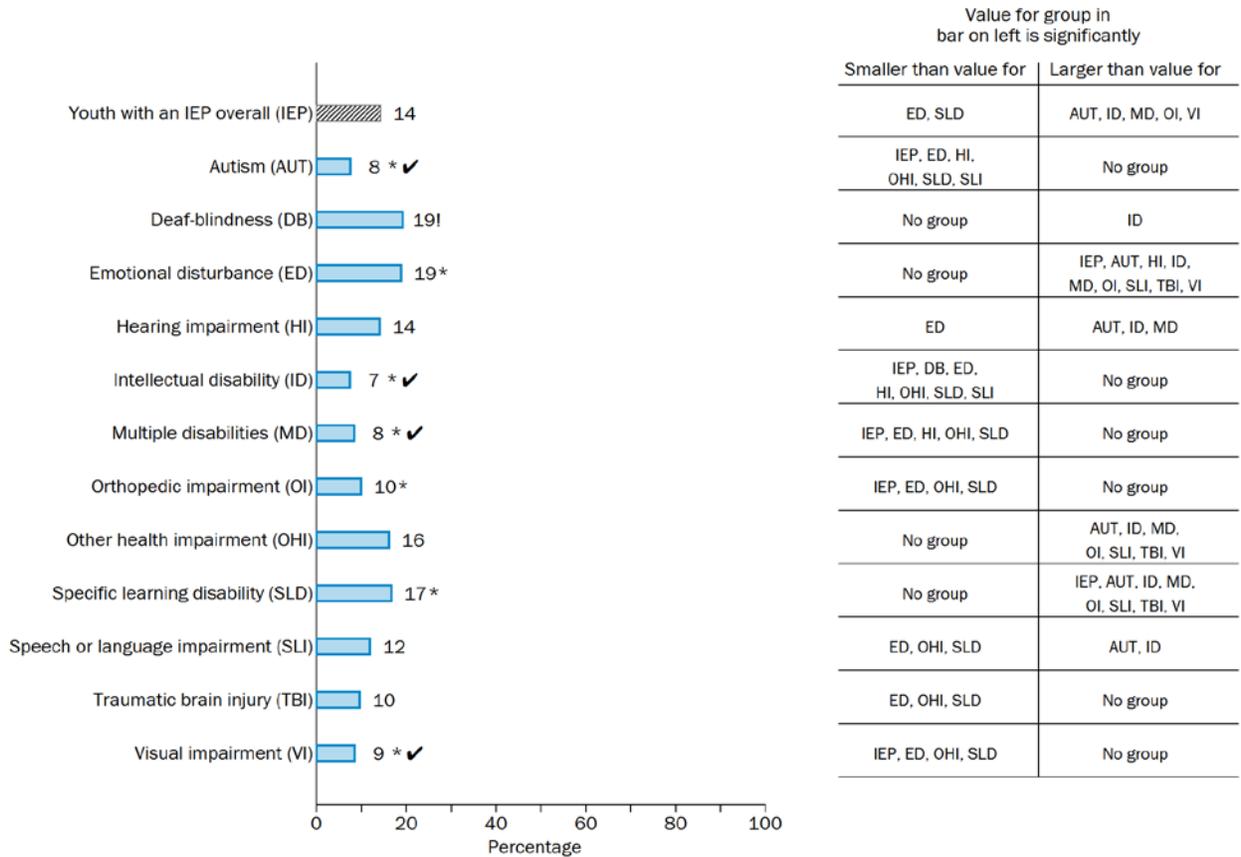
Note: Youth survey respondents, excluding proxies, were asked whether school staff provided them with extra help before or after school or on weekends in academic subjects in this school year. Youth survey respondents, excluding proxies, were also asked whether school staff provided guidance on the classes they should take to prepare for what they plan to do after high school.

Source: National Longitudinal Transition Study 2012. The universe is youth who either received instruction in grades 9 through 13 or are both in an ungraded grade and at least 15 years old. More information is provided in appendix E, tables E-19 and E-20.

<sup>34</sup> Parents may be less informed than their child about the extra help that schools are providing because they were much less likely to report their children receiving supplementary academic help from schools. Specifically, 27 percent of parents of high school youth with an IEP overall reported that their children received this help from schools outside regular hours (table E-21). The proportions, however, were still lower in the same three groups.

- Youth in the same groups—autism, intellectual disability, and multiple disabilities—are also less likely than youth with an IEP overall to take catch-up courses (figure 25; see table E-22 for more detail). Overall, 14 percent of high school youth with an IEP take catch-up or double-dosed courses during school hours according to parents.<sup>35</sup> However, at most 9 percent of youth with autism, intellectual disability, multiple disabilities, and a fourth group—youth with visual impairments—do. Some research suggests that this type of more intensive instruction during school could be associated with credit accumulation, graduation, and college enrollment (Cortes, Goodman, & Nomi, 2013; Kemple, Herlihy, & Smith, 2005).

**Figure 25. Percentages of youth who took catch-up or double-dosed courses during school hours, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

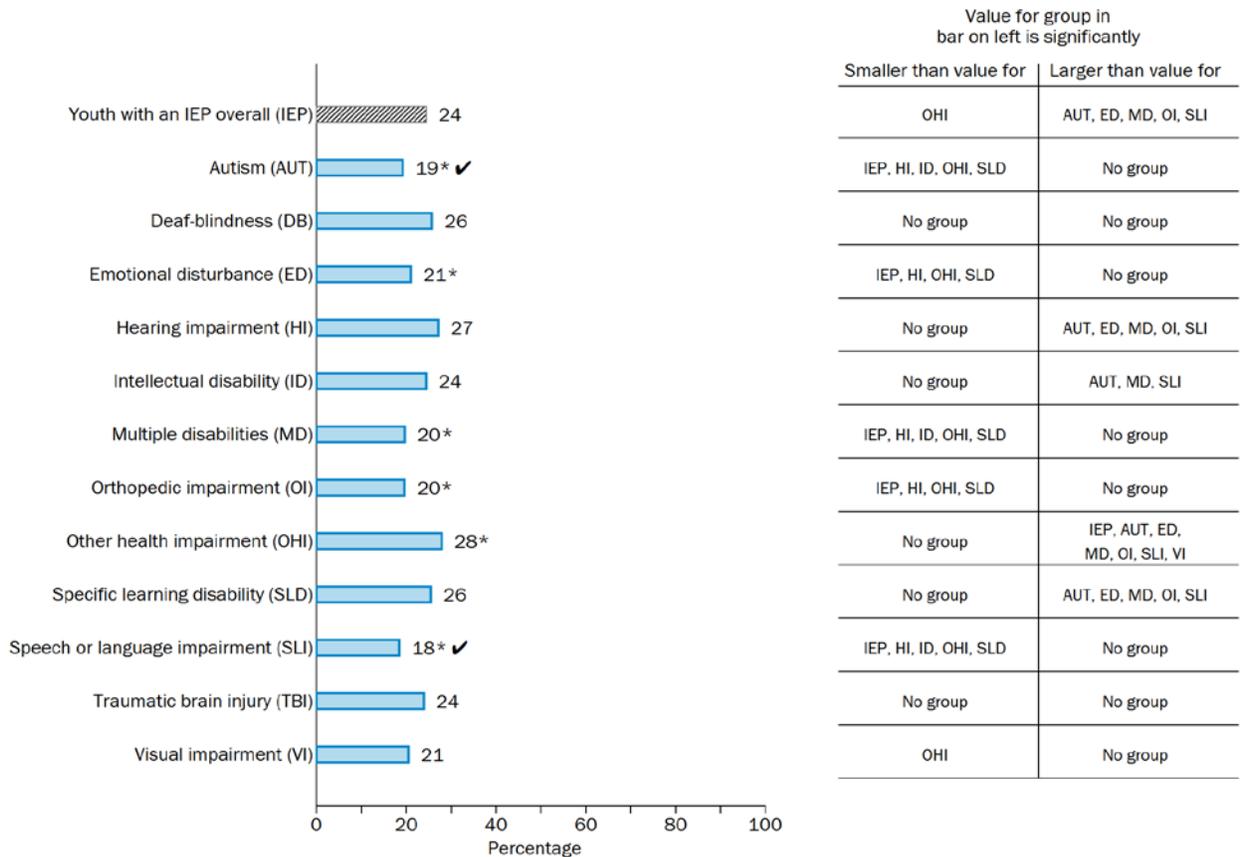
*Note:* Parent survey respondents were asked whether, during the school year, youth took catch-up or double-dosed courses during school hours.

*Source:* National Longitudinal Transition Study 2012. The universe is youth who either received instruction in grades 9 through 13 or are both in an ungraded grade and at least 15 years old. More information is provided in appendix E, table E-22.

<sup>35</sup> The parent survey did not provide an explicit definition of the term *catch-up courses*. The term might have been interpreted as including remedial courses. However, parents may have interpreted the term in other ways.

- About one quarter of youth in most disability groups receive tutoring services at school, but this is less common for youth with autism and speech or language impairments (figure 26; see table E-8 for more detail). Parents of youth with an IEP indicated that 24 percent had received tutoring services at school during the past year. The proportions across most of the disability groups were about the same as for youth with an IEP overall. Youth with autism (19 percent) and speech or language impairments (18 percent) are the exceptions, and less likely to receive tutoring services.

**Figure 26. Percentages of youth who received tutoring services at school in the past year, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents were asked whether youth received tutoring services at school in the past 12 months.

*Source:* National Longitudinal Transition Study 2012. The universe is youth whose parents reported that they ever had a disability or a Section 504 plan. More information is provided in appendix E, table E-8.

### **Most parents of youth in each disability group attend IEP and parent-teacher meetings, but parents in some groups are less likely to help with homework or attend school events**

The need to get parents involved has been a focus of both the No Child Left Behind Act of 2001 and IDEA since 1997. For instance, a performance indicator under IDEA 2004 requires states to report annually on the degree to which parents indicate schools are facilitating parent involvement to improve services and results for their children. Parents can support their children's educational development in many ways both at home and in school. For example, they can help their children with homework, discuss their school experiences, and attend school and class functions. Parents of youth with an IEP also have opportunities to meet with school staff through both regular parent-teacher conferences and an annual review of their children's IEP, as required by IDEA 2004. As reported in Volume 1, compared with other parents, parents of youth with an IEP on average more commonly report going to a parent-teacher conference in the past school year (84 versus 65 percent) and providing weekly homework help (62 versus 54 percent).<sup>36</sup> However, they are less likely to attend school or class events (58 versus 71 percent).

Studies indicate that, a decade ago, most parents across the disability groups participated in IEP meetings (Newman, 2005). The extent of that participation was related to other types of parent involvement at home and in school (Wagner, Newman, Cameto, Javitz, & Valdes, 2012). These other types of parent involvement such as volunteering at school or taking part in school meetings or events varied by disability group (Newman, 2005). The differences across disability groups are important because parental involvement, at least at home, was found earlier to be positively associated with whether youth in special education enroll in career and technical education programs as well as in two-year and four-year colleges (Wagner et al., 2014).

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<sup>36</sup> It is possible that some parents considered the survey question on their participation in parent-teacher conferences as including IEP meetings at which teachers were present.

- **More than three-quarters of parents in each disability group participate in IEP meetings and parent-teacher conferences** (table 23; see tables E-23 and E-24 for more detail). Eighty-six percent of parents of youth with an IEP overall reported that they or another household adult attended an IEP meeting during the current or prior school year. In addition, nearly the same proportion (84 percent) attended a parent-teacher meeting during the school year. Within each disability group, more than three-quarters of parents indicated that they attended these meetings. Parents of youth with speech or language impairments were least likely to participate in both IEP meetings (80 percent) and parent-teacher conferences (77 percent). The three groups most likely to attend an IEP meeting in the past two years were parents of youth with autism, deaf-blindness, and visual impairments (93 to 95 percent).<sup>37</sup>

**Table 23. Percentages of youth whose parent or another adult in the household recently attended an IEP meeting and a parent-teacher conference, by disability group**

Disability group	Parent attended an IEP meeting during the current or prior school year	Parent attended a parent-teacher conference during the school year
<b>Youth with an IEP overall</b>	<b>86</b>	<b>84</b>
Autism	93*✓	87
Deaf-blindness	95*✓	82
Emotional disturbance	90*	85
Hearing impairment	88	82
Intellectual disability	86	85
Multiple disabilities	90*	84
Orthopedic impairment	91*	83
Other health impairment	91*	87*
Specific learning disability	83*	84
Speech or language impairment	80*✓	77*✓
Traumatic brain injury	90	88
Visual impairment	94*✓	86

\*=difference compared with IEP is statistically significant at the .05 level. ✓=difference compared with IEP is at least 5.0 percentage points, and is statistically significant.

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. Parent survey respondents, excluding proxies, also were asked whether they or another adult in the household had gone to a parent-teacher conference since the beginning of the school year.

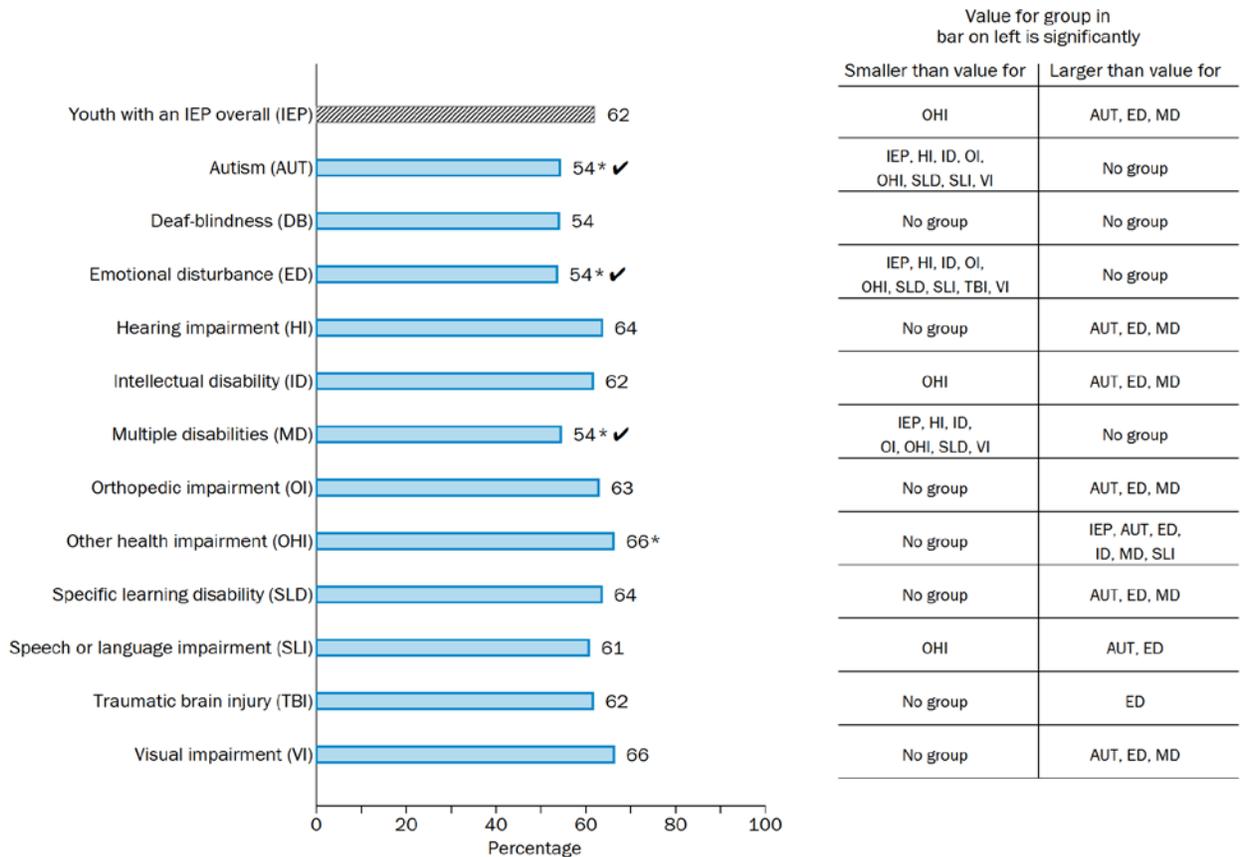
Source: National Longitudinal Transition Study 2012. The universe for the first measure is youth whose parent reported that they received special education services in the past year. The universe for the second measure is all youth. More detailed information is provided in appendix E, tables E-23 and E-24.

- **Parents of youth with autism, emotional disturbance, and multiple disabilities—groups less likely to receive supplemental academic instruction from school—are also less likely than other parents to help with homework** (figure 27, see table E-25 for more detail). Overall, 62 percent of parents of youth with an IEP indicated that they or another adult in the household provide homework help at least once a week, but this is true for just 54 percent of parents in the three disability groups listed above. As noted in chapter 3, parents report that most youth with autism and multiple disabilities have trouble communicating, which could make it harder for these youth to discuss their homework with parents. Youth in these two groups (and those with emotional disturbance) are less likely than youth with an IEP overall to say they receive supplemental academic instruction through schools as well (see table 22). Parents of youth in these three

<sup>37</sup> No group of parents had an attendance rate in parent-teacher conferences that was at least 5 percentage points larger than among parents of youth with an IEP overall.

groups are similar to parents of youth with an IEP overall in terms of the proportion who report that they or another household adult talk regularly with their child about school experiences, suggesting that the difficulty communicating or staying engaged might not impede all school-related discussions (table E-26). The reverse pattern holds for parents of youth with intellectual disability; an average proportion report helping their children with homework (62 percent), but they are 7 percentage points less likely than parents of youth with an IEP overall to discuss school experiences with their children regularly (77 versus 84 percent).

**Figure 27. Percentages of youth whose parent or another adult in the household helped them with homework at least once a week during the school year, by disability group**



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

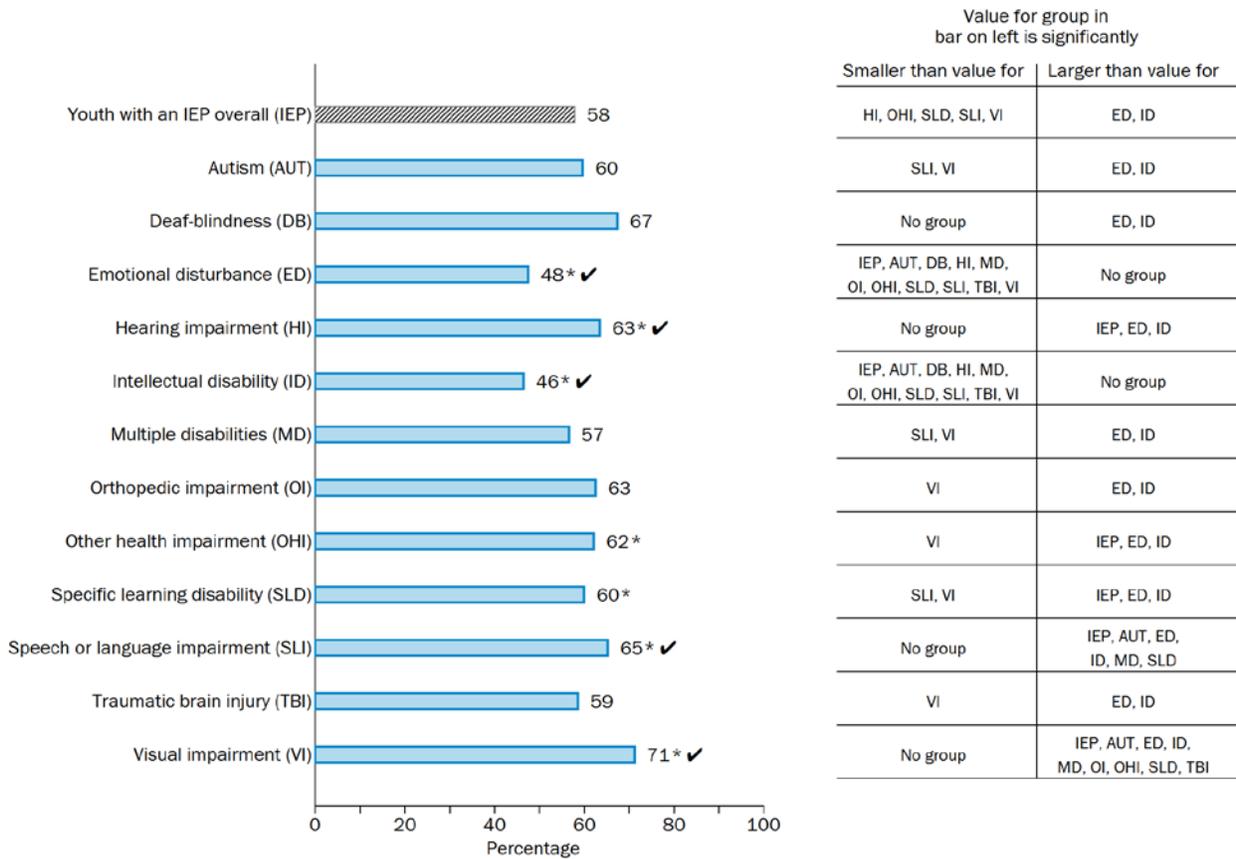
*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents, excluding proxies, were asked how often they or another adult in the household helped youth 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.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix E, table E-25.

- Most parents in all disability groups except for youth with emotional disturbance and intellectual disability are involved in school or class activities (figure 28; see table E-27 for more detail). In most disability groups, more than 60 percent of parents report that they or another adult in the household participated in a school or class event during the school year. The largest proportion is among parents of youth with visual impairments (71 percent). In contrast, fewer than half of parents of youth with emotional disturbance and intellectual disability (48 and 46 percent) participated in one of these events. These two groups of parents also are less likely than parents of youth with an IEP overall to attend general school meetings and volunteer at school (tables E-28 and E-29). These findings for parents of youth with emotional disturbance and intellectual disability are consistent with the demands of being a single parent making it more challenging to attend school functions, as these two groups of parents are least likely to be married (see chapter 2).

**Figure 28. Percentages of youth whose parent or another adult in the household attended a school or class event during the school year, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents, excluding proxies, were asked whether they or another adult in the household attended a school or class event since the start of the school year.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix E, table E-27.

**Within most disability groups, receipt of supplemental academic supports in school and at home does not vary by household income, but Black youth are more likely to receive these supports**

The receipt of supplemental academic support from schools and at home could be related to students’ backgrounds and the characteristics of their schools. The direction of the possible relationships among these indicators and student characteristics is difficult to anticipate. For example, policies such as Title 1 target funds for supplemental supports to students who are lower income, making these students potentially more likely than those from higher-income households to receive those supports. However, it is also possible that youth from economically disadvantaged households are less likely to be aware of the supplemental academic supports available to them through schools.<sup>38</sup>

- **Within nearly all disability groups, receipt of supplemental academic support from school and at home does not vary by household income** (table 24a, see tables E-30 to E-31 for more detail). Among all youth with an IEP, those in low-income and higher-income households are just as likely to receive supplemental academic help from school after regular school hours and weekly parent homework help. Youth with autism are the exception. Within that group, 46 percent of parents of those in low-income households reported providing weekly help with homework, less than the 60 percent reported by parents of those in higher-income households. However, among high school youth with autism, those with higher incomes are just as likely as those with low incomes to report receiving supplementary academic support at school.

**Table 24a. Household income groups less likely to receive academic supports from schools and at home, by disability group**

Disability group	Groups less likely to receive:	
	School-based academic help outside regular school hours (youth reported)	Parent or another household adult helped with homework at least weekly (parent reported)
<b>Youth with an IEP overall</b>		
Autism		Low income
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: A household income group is identified if it is less likely than the other household income group to receive academic supports from schools or at home (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across household income groups that meet this criterion. The groups are youth in low income and higher income households.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix E, tables E-30 to E-31.

<sup>38</sup> As explained previously, the small number of students in some disability groups and with some of these characteristics means that what look like differences between subgroups of students could be due to random chance. For this reason, similar to the rest of the report, two subgroups are considered different on a measure only when the difference is statistically significant and at least five percentage points in size. In addition, the text focuses on describing subgroup differences that exist for all youth with an IEP and at least one disability group.

- **Within nine disability groups, youth who are neither Black nor Hispanic are less likely than Black youth to get academic support from school or at home** (table 24b; see tables E-30 to E-31 for more detail). Overall, youth with an IEP who are neither Black nor Hispanic (that is, White, Asian, or another race) are 5 percentage points less likely than Black youth to report receiving academic help at school outside of regular hours (70 versus 75 percent). Their parents are also 12 percentage points less likely to report providing homework help at least weekly (59 versus 71 percent). This difference in receipt of supplemental school academic support by race exists among those with autism, deaf-blindness, and visual impairments. The difference in receipt of weekly parental homework help by race occurs within seven disability groups. In addition, parents of Hispanic youth within three disability groups are less likely than parents of Black youth to report providing weekly help with homework.

**Table 24b. Racial and ethnic groups less likely to receive academic supports from schools and at home, by disability group**

Disability group	Groups less likely to receive:	
	School-based academic help outside regular school hours (youth reported)	Parent or another household adult helped with homework at least weekly (parent reported)
<b>Youth with an IEP overall</b>	<b>White, Asian, other</b>	<b>Hispanic White, Asian, other</b>
Autism	White, Asian, other	
Deaf-blindness	White, Asian, other	
Emotional disturbance		White, Asian, other
Hearing impairment		Hispanic
Intellectual disability		White, Asian, other
Multiple disabilities		White, Asian, other
Orthopedic impairment		
Other health impairment		White, Asian, other
Specific learning disability		Hispanic White, Asian, other
Speech or language impairment		Hispanic White, Asian, other
Traumatic brain injury		
Visual impairment	Hispanic White, Asian, other	White, Asian, other

Note: A racial and ethnic group is identified if it is less likely than at least one other racial and ethnic group to receive academic supports from schools or at home (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across racial and ethnic groups that meet this criterion. The groups are Black, Hispanic, and a combined group of White, Asian, and other youth.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix E, tables E-30 to E-31.

- **Males and females are just as likely to receive supplemental school-based academic help, but males in three disability groups are less likely to get parental help with homework** (table 24c; see tables E-30 to E-31 for more detail). Within every disability group, similar proportions of high school age males and females report receiving supplemental academic support from schools. In contrast, males are 6 percentage points less likely than females to receive parental help with homework among youth with an IEP overall (60 versus 66 percent). A smaller proportion of males than females receive weekly parental homework help within three disability groups—youth with emotional disturbance, specific learning disabilities, and traumatic brain injuries.

**Table 24c. Gender groups less likely to receive academic supports from schools and at home, by disability group**

Disability group	Groups less likely to receive:	
	School-based academic help outside regular school hours (youth reported)	Parent or another household adult helped with homework at least weekly (parent reported)
<b>Youth with an IEP overall</b>		<b>Male</b>
Autism		
Deaf-blindness		
Emotional disturbance		Male
Hearing impairment		
Intellectual disability		
Multiple disabilities		
Orthopedic impairment		
Other health impairment		
Specific learning disability		Male
Speech or language impairment		
Traumatic brain injury		Male
Visual impairment		

Note: A gender group is identified if it is less likely than the other gender group to receive academic supports from schools or at home (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across gender groups that meet this criterion. The groups are female and male youth.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix E, tables E-30 to E-31.

- In all disability groups, older youth are less likely than younger youth to receive parental help with homework** (table 24d; see tables E-32 to E-33 for more detail). Among parents of youth with an IEP overall, those whose children are ages 19 or older are 30 percentage points less likely than those whose children are ages 14 or younger to report providing weekly help with homework (45 versus 75 percent). This pattern holds across nearly all disability groups. Similarly, parents whose children are ages 15 to 18 are 19 percentage points less likely than those with children ages 14 or younger to report providing weekly help with homework, both overall (56 versus 75 percent) and within eight disability groups. The oldest youth are also less likely than both younger age groups to report receiving school-based academic help outside regular school hours (62 versus 72 and 73 percent); however this pattern does not occur within individual disability groups.

**Table 24d. Age groups less likely to receive academic supports from schools and at home, by disability group**

Disability group	Groups less likely to receive:	
	School-based academic help outside regular school hours (youth reported)	Parent or another household adult helped with homework at least weekly (parent reported)
<b>Youth with an IEP overall</b>	<b>19 or older</b>	<b>15 to 18 19 or older</b>
Autism	No data	15 to 18 19 or older
Deaf-blindness	15 to 18	No data
Emotional disturbance		15 to 18 19 or older
Hearing impairment		15 to 18 19 or older
Intellectual disability		15 to 18 19 or older
Multiple disabilities		19 or older
Orthopedic impairment		19 or older
Other health impairment		15 to 18 19 or older
Specific learning disability		15 to 18 19 or older
Speech or language impairment		15 to 18 19 or older
Traumatic brain injury		19 or older
Visual impairment		15 to 18 19 or older

*Note:* An age group is identified if it is less likely than at least one other age group to receive academic supports from schools or at home (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across age groups that meet this criterion. The groups are youth who are 14 years old or younger, 15 to 18 years old, and 19 years old or older.

*Source:* National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix E, tables E-32 to E-33.

- **Within four disability groups, youth with lower functional abilities are less likely to report receiving academic support from schools** (table 24e; see tables E-32 to E-33 for more detail). Among all youth with an IEP, those with lower functional abilities are 8 percentage points less likely than those with higher functional abilities to say they receive school-based help outside regular school hours (67 versus 75 percent). These differences between youth with lower and higher functional abilities are even larger—11 to 36 percentage points—among those with deaf-blindness, hearing impairments, intellectual disability, and traumatic brain injuries. Across all the disability groups, no differences exist in the proportions of youth with lower and higher functional abilities whose parents say they provide help with homework at least weekly.

**Table 24e. Functional abilities groups (higher or lower) less likely to receive academic supports from schools and at home, by disability group**

Disability group	Groups less likely to receive:	
	School-based academic help outside regular school hours (youth reported)	Parent or another household adult helped with homework at least weekly (parent reported)
<b>Youth with an IEP overall</b>	<b>Lower</b>	
Autism		
Deaf-blindness	Lower	
Emotional disturbance		
Hearing impairment	Lower	
Intellectual disability	Lower	
Multiple disabilities		
Orthopedic impairment		
Other health impairment		
Specific learning disability		
Speech or language impairment		
Traumatic brain injury	Lower	
Visual impairment		

Note: A functional abilities index group is identified if it is less likely than the other functional abilities index group to receive academic supports from schools or at home (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across functional abilities index groups that meet this criterion. The groups are youth with lower and higher functional abilities index scores.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix E, tables E-32 to E-33.

- **Receipt of supplemental academic support at school and from parents does not vary within most disability groups for students in lower-performing and higher-performing schools** (table 24f; see tables E-34 to E-35 for more detail). However, four groups are exceptions. Specifically, youth with orthopedic impairments in lower-performing schools are less likely than those in higher-performing schools to say they receive school-based academic help outside regular school hours. Youth with autism in lower-performing schools are less likely than those in higher-performing schools to receive parental help with homework. The opposite is true for youth with emotional disturbance and visual impairments.

**Table 24f. School academic performance groups (higher or lower performing) less likely to receive academic supports from schools and at home, by disability group**

Disability group	Groups less likely to receive:	
	School-based academic help outside regular school hours (youth reported)	Parent or another household adult helped with homework at least weekly (parent reported)
<b>Youth with an IEP overall</b>		
Autism		Lower performing
Deaf-blindness		
Emotional disturbance		Higher performing
Hearing impairment		
Intellectual disability		
Multiple disabilities		
Orthopedic impairment	Lower performing	
Other health impairment		
Specific learning disability		
Speech or language impairment		
Traumatic brain injury		
Visual impairment		Higher performing

*Note:* A school academic performance group is identified if it is less likely than the other school academic performance group to receive academic supports from schools or at home (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across school academic performance groups that meet this criterion. The groups are youth in lower performing and higher performing schools.

*Source:* National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix E, tables E-34 to E-35.

- **Within five disability groups, supplemental academic support from schools or at home is lower among youth attending schools in towns or rural areas** (table 24g; see tables E-34 to E-35 for more detail). Youth with multiple disabilities and specific learning disabilities in towns or rural areas are less likely than those in cities to report receiving supplemental school-based academic help. Among youth with multiple disabilities, traumatic brain injuries, and visual impairments, receipt of this kind of academic help is less common for youth in towns or rural areas than in suburbs. Finally, parents of youth with specific learning disabilities and speech or language impairments in towns or rural areas are less likely than those living in suburbs and cities to report providing weekly help with homework.

**Table 24g. School locale groups less likely to receive academic supports from schools and at home, by disability group**

Disability group	Groups less likely to receive:	
	School-based academic help outside regular school hours (youth reported)	Parent or another household adult helped with homework at least weekly (parent reported)
<b>Youth with an IEP overall</b>	<b>Town or rural</b>	<b>Town or rural</b>
Autism		
Deaf-blindness		City
Emotional disturbance		
Hearing impairment		
Intellectual disability		
Multiple disabilities	Town or rural	
Orthopedic impairment		City
Other health impairment		
Specific learning disability	Town or rural	Town or rural
Speech or language impairment		Suburb
	City	Town or rural
Traumatic brain injury	Town or rural	
Visual impairment	Town or rural	

Note: A school locale group is identified if it is less likely than at least one other school locale group to receive academic supports from schools or at home (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across school locale groups that meet this criterion. The groups are youth attending school in a city, suburb, or town or rural area.

Source: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix E, tables E-34 to E-35.

- **In all disability groups, the receipt of academic support from schools and parents does not depend on the size of a school’s special education population** (tables E-34 and E-35). Youth in schools with larger and smaller shares of youth with an IEP were just as likely to receive academic support at school outside regular hours and to receive homework help from their parents; this is the case both overall for all youth with an IEP and within each disability group.

## **Chapter 6. How are youth preparing for life after high school?**

High school is a time for students to gain experience and knowledge and to take steps that lay the foundation for their transition to adulthood. The Individuals with Disabilities Education Act (IDEA) of 2004 increased the emphasis on helping youth with an individualized education program (IEP) to prepare for the future through thoughtful, goal-oriented planning. For instance, Congress added a requirement that when school staff help youth with an IEP define postsecondary goals, they make sure these goals are measurable and thus well-defined. Transition planning must also reflect not only youths' preferences and interests, but also their strengths. The extent to which youth currently participate in goal-setting and planning can be important because research suggests students' participation in these activities and services might be linked with better post-high school outcomes (Mazzotti et al., 2016).

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### **Key findings in chapter 6**

- **Most youth in each disability group attend transition-planning meetings at school, but fewer provide input, particularly among those with autism, deaf-blindness, intellectual disability, and multiple disabilities.** Reflecting on their transition activities, 69 percent of youth ages 17 and older with an IEP, and more than half in each disability group, report having attended a transition-planning meeting. However, parents report that only 59 percent of youth in this age range with an IEP provide input during their IEP and transition-planning meetings. The proportions providing input are even lower (25 to 42 percent) for youth with autism, deaf-blindness, intellectual disability, and multiple disabilities.
  - **Youth with intellectual disability and multiple disabilities have lower educational expectations, and these groups are less likely to take college entrance tests.** More than three-quarters (76 percent) of all youth with an IEP expect to obtain postsecondary education, but only 50 percent of youth with intellectual disability and 60 percent of youth with multiple disabilities do. In each disability group, parents' educational expectations for their children are lower than their children's own expectations. Parents' postsecondary education expectations are lowest for youth with intellectual disability and multiple disabilities (32 and 35 percent), the groups also least likely to report taking college entrance or placement tests (24 and 16 percent versus 42 percent of all youth ages 16 and older with an IEP.
  - **Compared to youth with an IEP overall, those with autism, deaf-blindness, intellectual disability, multiple disabilities, and orthopedic impairments are less likely to have paid jobs during high school and parents who expect them to live independently.** Fewer than half (40 percent) of all youth with an IEP report having had a paid job in the past year, but this is less common (20 to 32 percent) for youth in these four groups. Schools appear to be filling part of the gap: youth with autism, intellectual disability, and multiple disabilities are more likely than youth with an IEP overall to have a paid or unpaid school-sponsored work activity (18 to 22 percent versus 12 percent). Three quarters of parents expect their children with an IEP to live on their own by age 30, but this is true for smaller proportions (35 to 55 percent) of those with autism, intellectual disability, multiple disabilities, and orthopedic impairments.
  - **Within most disability groups, youth in low-income households and those with lower functional abilities are at greater risk in terms of their preparation for life after high school.** Low-income youth have lower postsecondary education expectations within five disability groups, and within eight groups their parents are less likely to think they will live independently. In all the groups, youth with lower functional abilities are less likely to provide input on transition plans, expect to obtain further education, take college entrance tests, have paid jobs, or have parents who think they will live on their own.
-

Schools can help facilitate students' transitions from school to adult life in several ways. This could include discussing postsecondary goals and transition plans, assisting with college applications, providing help with finding jobs or internships, and establishing contacts with community service providers. The disability groups may vary in the extent of their participation in these activities, as previous research suggests (Cameto, Levine, & Wagner, 2004; Mazzotti, et al., 2016). For instance, a previous study found that youth with autism were less likely than those with learning disabilities to attend and actively participate in IEP and transition planning meetings, even though their parents were more likely than parents of youth with learning disabilities to attend (Wagner et al., 2012). The stakes for students' preparation could be higher now than in the past, given literature associating paid work experience in high school with later adult employment (Mazzotti et al., 2016; Test et al., 2009) and the growing earnings premium in the U.S. economy for postsecondary education (Avery & Turner, 2012; Oreopoulos & Petronijevic, 2013).

The sources of the key information in this chapter are as follows:

- *Involvement in the transition-planning process*: parent and youth surveys
- *Educational expectations and perceived challenges with pursuing postsecondary education*: parent and youth surveys
- *Steps youth are taking to prepare for postsecondary education*: parent and youth surveys
- *Work experience, perceived challenges securing jobs, expectations for living independently*: parent and youth surveys
- *Subgroup differences in expectations, postsecondary plans, and employment experiences*: parent and youth surveys

Detailed tables supporting the findings presented in this chapter are available in [appendix F](#).

### **Most youth in each disability group attend transition-planning meetings at school, but fewer provide input, particularly among those with autism, deaf-blindness, intellectual disability, and multiple disabilities**

According to IDEA 2004, by the time youth turn 16, school staff are required to work with families to develop a transition plan that becomes part of students' IEPs and comprises a set of transition goals and plans to help students achieve them. These goals encompass specific postsecondary objectives relating to postsecondary education, employment, and, independent living. The plans specify a course of study in high school and the transition services needed to achieve the transition goals. Over the past two decades, practitioners and policymakers have placed greater emphasis on youth assuming an active role in this planning process to ensure the plan adequately reflects their interests and engages them in pursuing postsecondary goals (Martin & Marshall, 1995; Wehmeyer, Agran, & Hughes, 1998).

- **Most youth with an IEP and their parents attend transition-planning meetings, but youth with multiple disabilities have lower-than-average attendance rates** (table 25; see tables F-1 to F-5 for more detail). Reflecting on their IEP and transition activities, 78 percent of youth with an IEP ages 17 or older report having gone to an IEP meeting during the current or prior school year. Sixty-nine percent of youth with an IEP in that age range and 61 percent of their parents indicate having met with school staff to develop a transition plan.<sup>39</sup> More than half of youth and parents in each disability group report attending such a

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<sup>39</sup> The report examines reflections about IEP and transition experiences among youth starting at age 17 (and their parents) because of incomplete NLTS 2012 youth survey data for 16 year olds. Specifically, 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 attendance rates including 16 year olds are likely to be less than reported in table 25 given that parents' reports of their own attendance are five percentage points lower overall when 16 year olds are included. The

meeting (55 to 74 percent for youth and 52 to 69 percent for parents).<sup>40</sup> Youth with multiple disabilities (55 percent) are less likely than youth with an IEP overall to report attending transition-planning meetings, but their parents are more likely than average to attend (69 percent). The lower attendance rate among youth with multiple disabilities may partially reflect the communication and cognitive issues many youth in this group face (see chapter 3). Community service agency staff attend transition-planning meetings about one-third (38 percent) of the time according to parents. These representatives are most likely to participate in transition-planning meetings for youth with deaf-blindness and visual impairments (63 and 68 percent), and least likely to attend meetings for youth with speech or language impairments (21 percent).

**Table 25. Percentages of youth, parents, and community service agency staff who have met with school staff to develop a transition plan, by disability group**

Disability group	Youth attended an IEP meeting during the current or prior school year	Whether youth, parents, and community service agency staff have met with school staff to develop a transition plan		
		Youth	Parents	Community service agency staff
<b>Youth with an IEP overall</b>	<b>78</b>	<b>69</b>	<b>61</b>	<b>38</b>
Autism	77	64	67*✓	43
Deaf-blindness	70	60	68	63*✓
Emotional disturbance	78	66	61	41
Hearing impairment	78	73	64	48*✓
Intellectual disability	80	67	68*✓	50*✓
Multiple disabilities	77	55*✓	69*✓	44
Orthopedic impairment	77	60	61	45
Other health impairment	79	74	59	33
Specific learning disability	78	71	57*	31*✓
Speech or language impairment	64*✓	60	54	21*✓
Traumatic brain injury	64*✓	60	52	39
Visual impairment	86	74	64	68*✓

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

Note: Youth survey respondents were asked whether they went to an IEP meeting during the current or prior school year. Youth and parent survey respondents 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 whether staff from a community service agency, such as vocational rehabilitation services, took part in the meeting.

Source: National Longitudinal Transition Study 2012. The universe for columns 1 and 2 is youth who have an IEP according to their school district and are at least 17 years old. The universe for column 3 is youth whose parent reported that they received special education services in the past year and are at least 17 years old. The universe for column 4 is youth whose parent reported either attending a transition-planning meeting or indicated that one had occurred and who are at least 17 years old. More information is provided in appendix F, tables F-1 to F-5.

proportions across the disability groups are lower by approximately this amount as well. The parent-reported data in this section of chapter 6 pertain to parents who indicated that their children received special education services in the past school year.

<sup>40</sup> Nearly all parents of youth with an IEP ages 17 or older who reported that, to the best of their knowledge, a transition-planning meeting had occurred indicate that both they (90 percent) and their child (92 percent) were invited (tables F-6 and F-7). Parents report that invitations are less likely for youth with autism and multiple disabilities (86 and 85 percent).

- **The vast majority of transition-planning meetings include discussion of youths’ interests, strengths, and preferences, and most also cover specific post-high school options** (table 26, see tables F-8 and F-9 for more detail). Among parents of youth with an IEP ages 17 and above who reported that a transition-planning meeting had occurred, 93 percent indicate that the meeting included such discussion. In each disability group, at least 88 percent of parents report discussing these issues. IDEA 2004 requires that IEP teams take these issues into account when determining the set of transition services that schools provide. Overall, 64 percent of parents report that school staff provided information on education, careers, and community living options for after high school. Parents of youth with autism, deaf-blindness, and traumatic brain injuries are less likely than parents of youth with an IEP overall to report receiving this information (36 to 54 percent).

**Table 26. Percentages of youth whose interests, strengths, and preferences were discussed and who were given information on post-high school options in a transition-planning meeting, by disability group**

Disability group	Interests, strengths, and preferences discussed	Received information on education, career, and living options for after high school
<b>Youth with an IEP overall</b>	<b>93</b>	<b>64</b>
Autism	91	54*✓
Deaf-blindness	98*	36!✓
Emotional disturbance	93	65
Hearing impairment	88	69
Intellectual disability	91	66
Multiple disabilities	93	60
Orthopedic impairment	95	63
Other health impairment	94	63
Specific learning disability	95*	64
Speech or language impairment	91	64
Traumatic brain injury	93	45*✓
Visual impairment	94	77

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

Note: Parent survey respondents were asked whether, at the transition-planning meeting, their child’s interests, strengths, and preferences were discussed and whether their child was given information on education, careers, or community living options for when he/she leaves high school.

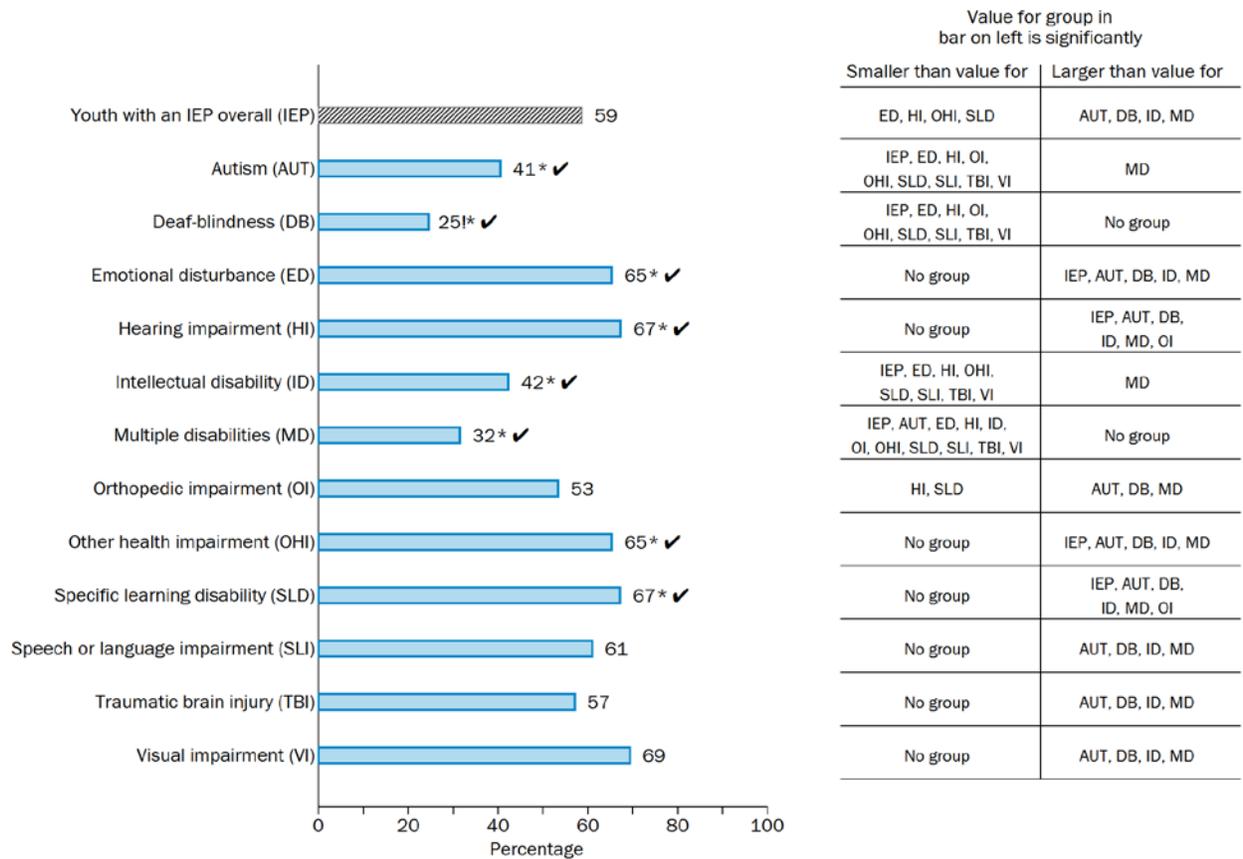
Source: National Longitudinal Transition Study 2012. The universe is youth whose parents reported either attending a transition-planning meeting or indicated that one had occurred and who are at least 17 years old. More information is provided in appendix F, tables F-8 and F-9.

- **Most youth provide input in their IEP and transition planning, except in four disability groups—autism, deaf-blindness, intellectual disability, and multiple disabilities** (figure 29; see table F-10 for more detail). Fifty-nine percent of youth ages 17 and above receiving special education services either provide some input or take a leadership role in IEP and transition planning, according to parents who reported that either they or another adult in the household attended an IEP or transition-planning meeting. Fewer than half of youth provide input among those with autism (41 percent), deaf-blindness (25 percent), intellectual disability (42 percent), and multiple disabilities (32 percent).<sup>41</sup> Parents indicated that even smaller proportions of youth in these four groups played at least an equal role with parents and school staff in defining their IEP and/or transition plan goals (23 to 32 percent; see table F-12). As noted in chapter 3, youth in these groups have

<sup>41</sup> Youth were also asked about their level of input in developing their IEP and transition plans. Similar to their parents’ responses, youth with autism, intellectual disability, and multiple disabilities (59 to 62 percent) are less likely than youth with an IEP overall (70 percent) to report providing input or taking a leadership role, among those age 17 and above (table F-11).

more difficulty communicating and understanding. Perhaps as a result, school staff may have greater difficulty securing input from these groups.

**Figure 29. Percentages of youth who provided at least some input in IEP and transition planning, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*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.

*Source:* National Longitudinal Transition Study 2012. The universe is youth whose parents reported that they received special education services in the past year, are at least 17 years old, and whose parent or another adult in the household attended an IEP or transition-planning meeting. More information is provided in appendix F, table F-10.

**At least half of youth with an IEP in each disability group expect to obtain postsecondary education, but their parents have lower expectations and are more inclined to think they will face challenges, particularly youth in two groups**

Educational expectations indicate the extent to which youth and their parents view postsecondary education as a likely youth outcome. Examining parents' expectations is useful not only to gauge whether they are aligned with their children's perspectives, but also because parents play an important role in shaping their children's self-confidence and plans. They are also typically aware of the challenges their children may face after leaving high school, challenges that policymakers and educators may be able to help youth overcome. As noted in Volume 1, a smaller proportion of youth with an IEP overall expect to obtain some postsecondary education, compared with their peers (76 versus 94 percent) and smaller shares of parents in both groups hold these expectations (61 versus 90 percent). Moreover, research on youth with an IEP a decade ago found that parents' educational expectations differed across disability groups (Newman, 2005). The differences across disability groups are important because some research on youth with an IEP suggests that parents' educational expectations are positively associated with their children's post-high school outcomes (Chiang, Cheung, Hickson, Xiang, & Tsai, 2012; Doren, Gau, & Lindstrom, 2012; Papay & Bambara, 2014; Wagner et al., 2014). These correlations may stem from expectations' having an effect on outcomes, or parents simply having accurate expectations.

- **Most youth in each disability group expect to obtain postsecondary education, but the proportions are smallest for youth with intellectual disability and multiple disabilities** (table 27; see tables F-13 and F-14 for more detail). Overall, 76 percent of youth with an IEP think that they will obtain postsecondary education—technical or trade school, two-year or four-year college, or an advanced degree. However, the proportions vary among the disability groups. Smaller shares of youth with intellectual disability (50 percent) and multiple disabilities (60 percent) and larger shares of youth with speech or language impairments (86 percent) and visual impairments (88 percent) say they will obtain postsecondary education. The patterns for youths' expectations of earning a four-year college degree across the disability groups are similar. Having high educational expectations is positively related to the likelihood that youth in special education will enroll in postsecondary education in the future (Wagner, Newman, Cameto, Levine, & Marder, 2007; Newman et al., 2011).

**Table 27. Percentages of youth and parents who expect youth to obtain postsecondary education, by disability group**

Disability group	Youth expects to obtain postsecondary education	Youth expects to obtain a four-year college degree	Parent expects youth will obtain postsecondary education	Parent expects youth will obtain a four-year college degree
<b>Youth with an IEP overall</b>	<b>76</b>	<b>51</b>	<b>61</b>	<b>34</b>
Autism	75	46*	53*✓	29*✓
Deaf-blindness	81	65	50	29
Emotional disturbance	75	52	58*	30*
Hearing impairment	79	57*✓	75*✓	51*✓
Intellectual disability	50*✓	27*✓	32*✓	9*✓
Multiple disabilities	60*✓	34*✓	35*✓	14*✓
Orthopedic impairment	77	62*✓	60	42*✓
Other health impairment	78	51	67*✓	34
Specific learning disability	79*	53*	67*✓	39*✓
Speech or language impairment	86*✓	69*✓	78*✓	58*✓
Traumatic brain injury	66	48	61	39
Visual impairment	88*✓	73*✓	79*✓	60*✓

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

Note: Youth and parent survey respondents, excluding proxies, were asked how far they think their child will get in school. Response categories included less than high school, high school diploma or generalized education development (GED) certificate, technical or trade school, two-year college, four-year college, or an advanced degree. Postsecondary education includes the last four response categories. Obtaining a four-year college degree includes the last two response categories.

Source: National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix F, tables F-13 to F-16.

- **Parents are less optimistic about whether their children will obtain postsecondary education, particularly parents of youth with autism, intellectual disability, and multiple disabilities** (table 27; see tables F-15 and F-16 for more detail). Overall, 61 percent of parents of youth with an IEP expect their children will obtain postsecondary education (less than the 76 percent of youth holding this expectation). Smaller proportions of parents of youth with autism (53 percent), intellectual disability (32 percent), and multiple disabilities (35 percent) think their children will continue their education after high school and even fewer expect their child to earn a four-year degree.

- Concerns about academic and social readiness to pursue postsecondary education are most prevalent among parents of youth in the same three groups (table 28; see table F-17 for more detail). Overall, 43 percent of parents of youth with an IEP who are at least 15 years old indicate that their children may not be academically or socially ready to continue their educations after high school. The disability groups in which these concerns are most prevalent—youth with autism (63 percent), intellectual disability (62 percent), and multiple disabilities (59 percent)—are among those that are less likely to participate in school activities and socialize with friends (see chapter 4). Half of parents of youth with emotional disturbance also expect this challenge.

**Table 28. Percentages of parents who perceive various challenges for their children with obtaining postsecondary education, by disability group**

Disability group	Youth is not academically or socially ready	Youth needs to work after high school	Does not have enough information about education and training options	Not sure how to get financial aid or help paying for school
<b>Youth with an IEP overall</b>	<b>43</b>	<b>60</b>	<b>36</b>	<b>42</b>
Autism	63*✓	61	38	54*✓
Deaf-blindness	57	53	42	48
Emotional disturbance	50*✓	66*✓	36	42
Hearing impairment	34*✓	53*✓	39	40
Intellectual disability	62*✓	60	35	49*✓
Multiple disabilities	59*✓	49*✓	28*✓	46
Orthopedic impairment	40	45*✓	31	45
Other health impairment	46	63	38	44
Specific learning disability	33*✓	59	37	38*
Speech or language impairment	32*✓	49*✓	29*✓	32*✓
Traumatic brain injury	47	56	36	49
Visual impairment	37	50*✓	32	34*✓

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

Note: Parent survey respondents, excluding proxies, were asked whether they think each item will be an issue the youth is likely to face in furthering his or her education and training after high school.

Source: National Longitudinal Transition Study 2012. The universe is youth who are at least 15 years old. More information is provided in appendix F, tables F-17 to F-20.

- A majority of parents in most disability groups, especially those of youth with emotional disturbance, report that needing to work may be a barrier to pursuing postsecondary education for their children (table 28; see table F-18 for more detail). A common challenge to pursuing postsecondary education, cited by 60 percent of parents of youth with an IEP ages 15 and above, is that their children need to work after high school. Parents of youth with emotional disturbance are most likely to express this concern (66 percent). It is possible that the lower average employment rate and household income of this group of parents makes it harder for their children to afford postsecondary education (see chapter 2). However, another group of relatively low-income parents—those of youth with intellectual disability—are no more likely than other parents to say that the need for their children to work is a potential barrier. Thus, economic status may or may not be a factor in whether the need to work poses a barrier to obtaining postsecondary education among youth with an IEP.
- More than one-third of parents in most disability groups report that they do not have enough information on postsecondary education options or how to pay for them (table 28; see tables F-19 and F-20 for more

detail). In particular, 36 percent of parents of youth with an IEP ages 15 and above report that they “do not have enough information about education and training options” for after high school. This percentage varied little across the disability groups, except that parents of youth with multiple disabilities (28 percent) and speech or language impairment (29 percent) were less likely to report this challenge. In addition, 42 percent of parents indicated that they do not know how to get financial aid or help paying for postsecondary education. Concern about paying for school is not limited to just the groups that appear to be most economically disadvantaged; the two groups most likely to report this challenge—parents of youth with autism (54 percent) and intellectual disability (49 percent)—are the groups that are least and most likely to have low household incomes (see chapter 2).

- **Youth with autism, deaf-blindness, intellectual disability, multiple disabilities, and traumatic brain injuries are more likely than youth with an IEP overall to perceive challenges with obtaining postsecondary education** (table 29; see tables F-25 to F-27 for more detail). Overall, 13 percent of youth with an IEP who are at least 15 years old report not knowing what further education they might need for jobs they want. However, the percentages are 6 to 11 points higher for youth with autism, intellectual disability, and multiple disabilities. Overall 31 percent of youth with an IEP ages 15 and above report not getting enough help from school staff about postsecondary schools they might want to attend. This challenge was most often reported by youth with multiple disabilities (40 percent) and youth with traumatic brain injuries (42 percent). Finally, about half of youth in each of these five disability groups (43 to 68 percent) report not knowing where to get help paying for postsecondary education, at least 8 percentage points higher than youth with an IEP overall (35 percent).

**Table 29. Percentages of youth who perceive challenges with obtaining postsecondary education, by disability group**

Disability group	Does not know what further education is needed for jobs might want	Is not getting enough help from school staff about schools might want to attend	Does not know where to get help paying for college or other types of schools
<b>Youth with an IEP overall</b>	<b>13</b>	<b>31</b>	<b>35</b>
Autism	24*✓	36	49*✓
Deaf-blindness	‡	33!	68*✓
Emotional disturbance	13	36*	35
Hearing impairment	14	27	39
Intellectual disability	19*✓	32	43*✓
Multiple disabilities	21*✓	40*✓	48*✓
Orthopedic impairment	14	31	31
Other health impairment	14	31	34
Specific learning disability	11*	30	32*
Speech or language impairment	11	31	33
Traumatic brain injury	17	42*✓	47*✓
Visual impairment	15	24	29

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

Note: Youth survey respondents, excluding proxies, were asked if they agreed that each item will be a challenge for deciding what to do after high school.

Source: National Longitudinal Transition Study 2012. The universe is youth who are at least 15 years old. More information is provided in appendix F, tables F-25, F-26, and F-27.

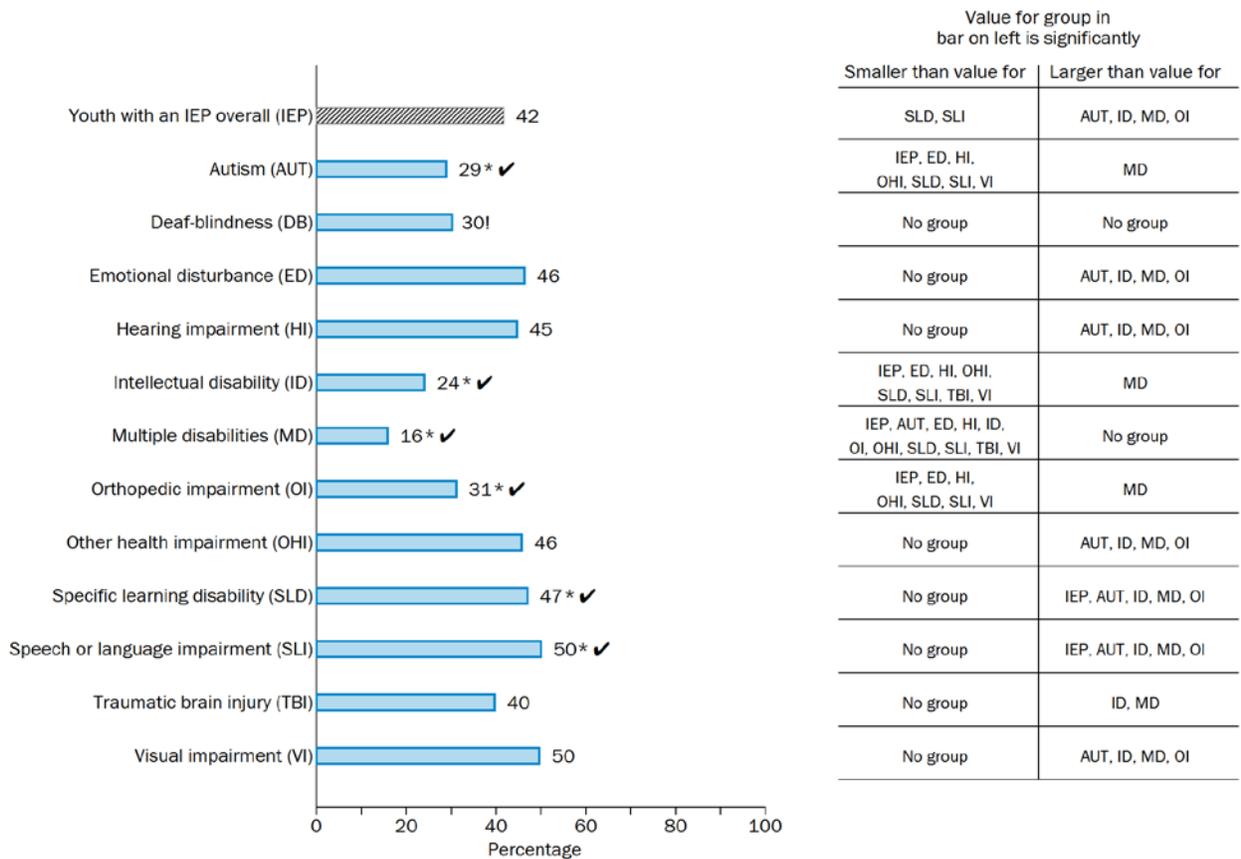
**Youth with autism, intellectual disability, and multiple disabilities are less likely than youth with an IEP overall to be taking steps to prepare for college**

IDEA 2004 increased the emphasis on helping youth with an IEP prepare for education after high school. These updates reflect awareness about both the growing value of postsecondary education in the labor market and growth in college attendance among youth with disabilities. Between 1990 and 2005, the percentage of youth with an IEP who enrolled in postsecondary education within four years of leaving high school grew from 26 to 46 percent, yet large differences persisted in college enrollment across the disability groups (Newman et al., 2010).

Many youth who are planning to attend college begin preparing well in advance. Preparation comes not only in terms of a focus on schoolwork and participating in extracurricular activities, but also preparing for college entrance and placement tests, and completing an application and personal essay. As reported in Volume 1, on average, youth with an IEP in high school are much less likely than their peers to take college entrance and placement tests (42 versus 70 percent).

- Taking a college entrance or placement test is least common among youth in the three disability groups for whom parents' educational expectations are lowest** (figure 30, see table F-21 for more detail). Overall, 42 percent of youth with an IEP ages 16 or older report taking a college entrance or placement test. These tests include the PSAT, SAT, or ACT, or a placement test for a two-year college. However, just 16 percent of those with multiple disabilities report taking such a test, as do 24 percent of those with intellectual disability and 29 percent of those with autism. These findings are consistent with parents' relatively low educational expectations for youth in these groups. Youth with orthopedic impairments are also less likely to take a college entrance or placement test (31 percent). Taking these tests is most common for youth with specific learning disabilities (47 percent) and speech or language impairments (50 percent).

**Figure 30. Percentages of youth who have taken a college entrance or placement test, by disability group**



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

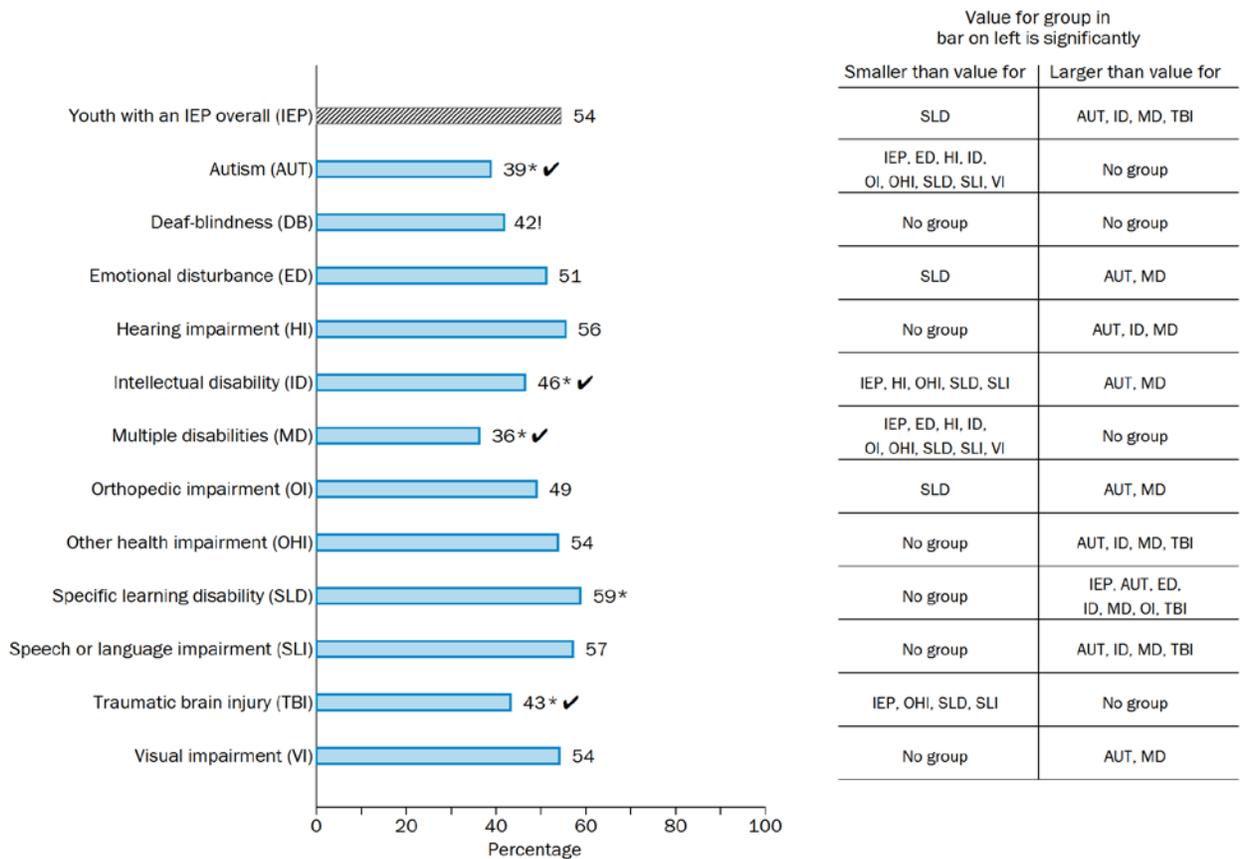
*Exhibit reads:* Readers interested in a particular student group can follow the group's bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group's bar and the values for the other groups' bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, "ED" will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, "ID" will appear in the right-hand column. If it is not statistically larger than the value for any other group, "No group" will appear in the right-hand column.

*Note:* Youth survey respondents were asked whether they have taken any of the following college placement tests: the Preliminary Scholastic Assessment Test (PSAT); the American College Test (ACT); the Scholastic Assessment Test (SAT); or the placement test for a local college, such as Accuplacer or other tests used by community colleges.

*Source:* National Longitudinal Transition Study 2012. The universe is youth who are at least 16 years old. More information is provided in appendix F, table F-21.

- Youth in the same three disability groups are less likely than youth with an IEP overall to report receiving assistance from school staff with the postsecondary education application process** (figure 31; see table F-22 for more detail). More than half of all youth with an IEP in high school (54 percent) report receiving at least one of the following types of assistance from schools: help filling out applications, help reviewing entrance test scores and deciding whether to retake tests, or help arranging a college visit or tour. Receiving one or more of these types of assistance is less common among youth with autism (39 percent), intellectual disability (46 percent), and multiple disabilities (36 percent), as well as traumatic brain injuries (43 percent). Differences in postsecondary education expectations may contribute to differences in receipt of postsecondary assistance from school staff; however, lack of assistance may also dampen youths' expectations.

**Figure 31. Percentages of youth who received help from school staff with the college application process during the school year, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group's bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group's bar and the values for the other groups' bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, "ED" will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, "ID" will appear in the right-hand column. If it is not statistically larger than the value for any other group, "No group" will appear in the right-hand column.

*Note:* Youth survey respondents, excluding proxies, were asked whether school staff provided help with at least one of the following: completing college application forms, reviewing college entry test scores, or arranging college visits during the school year.

*Source:* National Longitudinal Transition Study 2012. The universe is youth who either received instruction in grades 9 through 13 or are both in an ungraded grade and at least 15 years old. More information is provided in appendix F, table F-22.

**Youth in five groups—autism, deaf-blindness, intellectual disability, multiple disabilities, and orthopedic impairments—are less likely to have paid jobs while in high school, and their parents are more likely to think their children will not live independently**

Since the inception of IDEA in 1975, helping youth secure a job after high school and live independently have been and remain key goals on the path towards their living fulfilling lives. Schools have long helped youth get paid and unpaid work experience through cooperative programs (co-ops), internships, school-based enterprises, and supported work (Johnson, 2012). In fact, studies of youth receiving special education services a decade or more ago suggested that working during high school may have increased their chances of getting a job after they graduated (Baer et al., 2003; Carter et al., 2012; Test et al., 2009; Wagner et al., 2014).<sup>42</sup> Parents' expectations about their children's future financial self-sufficiency has been linked with youths' post-high school employment status (Carter et al., 2012) and, for youth in the early 2000's, shown to vary widely across disability groups (Newman, 2005). Finally, Schools can also assist in the development of students' self-determination and abilities to perform daily living tasks indicative of being able to live alone after high school or after postsecondary education and training (see chapter 3).

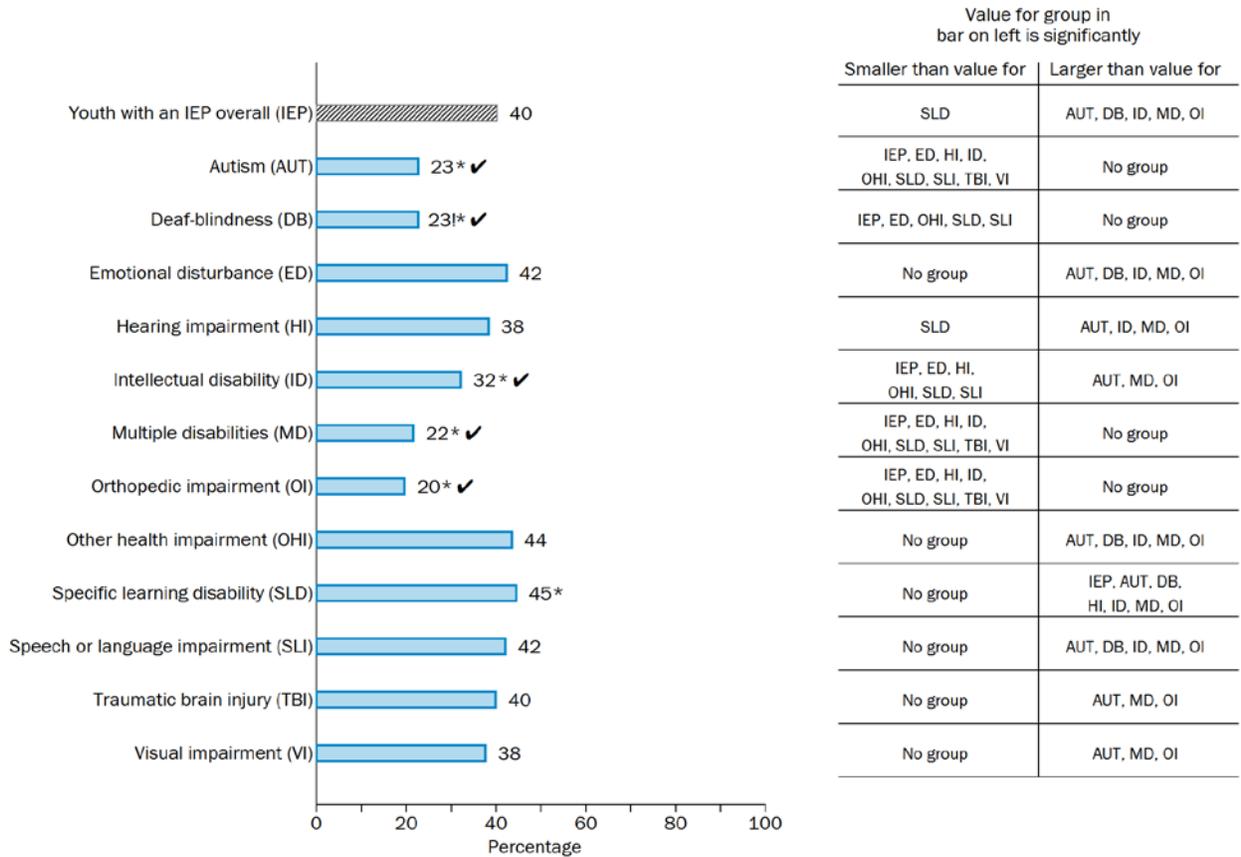
On average, youth with an IEP lag those without an IEP on these dimensions (see Volume 1). For example, youth with an IEP overall are less likely than their peers to have paid work experience in the past year (40 versus 50 percent), although they are more likely to participate in a school-sponsored work activity (12 versus 7 percent). Moreover, their parents are less likely than the parents of their peers to expect that they will live independently as adults (78 versus 96 percent).

- **Although four in 10 youth with an IEP overall have a paid work experience in the past year, this is the case for less than one-third of youth in five groups** (figure 32, see table F-23 for more detail). Youth with autism, deaf-blindness, intellectual disability, multiple disabilities, and orthopedic impairments least commonly report recent paid work experience (20 to 32 percent). The low paid work experience rates within these three groups might be partly due to functional limitations, as reflected in their greater difficulty with activities of daily living (see chapter 3), to other factors, or to some combination. Along with their parents' lower postsecondary education expectations, their low rates of paid work experience raise concerns about both their career prospects and their ability to be self-sufficient later in life. Despite these concerns, at least 90 percent of youth ages 15 and above in each group expect to have jobs by the time they are 30 years old (table F-35).

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<sup>42</sup> Like other studies cited earlier, those examining the effects of high school work may not be able to adequately isolate the effects of work from the characteristics of those who do and do not choose to work.

**Figure 32. Percentages of youth who have had paid work experience in the past year, by disability group**



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

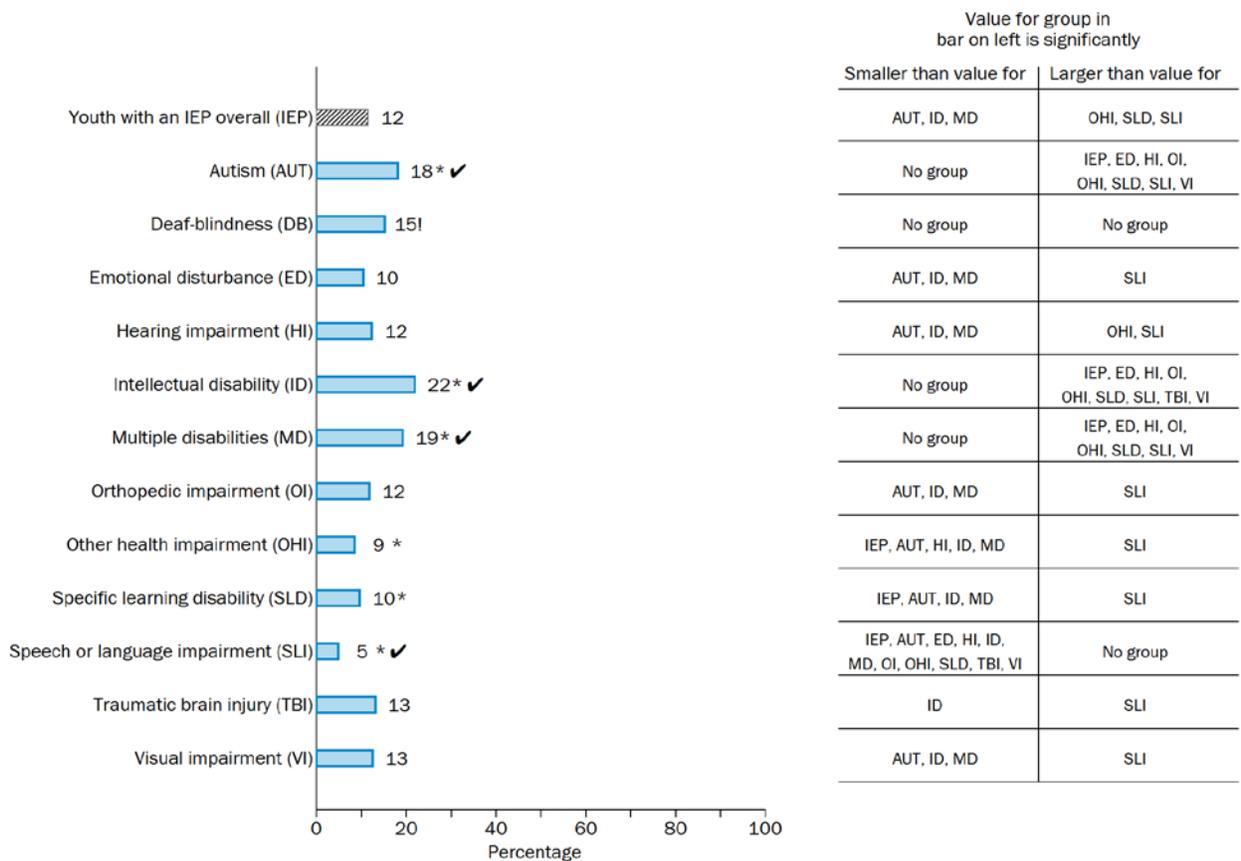
*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Youth survey respondents were asked whether they had either a paid school-sponsored job or another type of paid job in the past 12 months.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix F, table F-23.

- Youth in three of the disability groups with low rates of paid employment have high participation rates in school-sponsored work activities** (figure 33; see table F-24 for more detail). Overall, 12 percent of youth with an IEP report having participating in a school-sponsored work activity in the past year. School-sponsored work activities include work-study or co-op jobs, internships, or work in a school-based business, and can be paid or unpaid. Although some of these experiences are also reported as paid employment above, as reported in Volume 1, almost all of the paid work experiences that youth with an IEP report are arranged without school assistance. School-sponsored work experiences are particularly common among youth in three of the disability groups that have below-average rates of recent paid work experience, namely those with autism (18 percent), intellectual disability (22 percent), and multiple disabilities (19 percent). Youth in two other groups with low employment rates—deaf-blindness and orthopedic impairments—have similar participation rates in school-sponsored work activities as all youth with an IEP.

**Figure 33. Percentages of youth who had a paid or unpaid school-sponsored work activity in the past year, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*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.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix F, table F-24.

- **More than one-quarter of parents in most disability groups perceive challenges for their children with getting a job after high school, including the risk of losing disability benefits** (table 30; see tables F-28 and F-29 for more detail). Overall, 34 percent of parents of students with an IEP ages 15 or older report that school staff have not provided enough information about career planning or job opportunities. Parents of youth with autism and intellectual disability are most likely to express this concern (41 and 42 percent, respectively). In addition, on average, 19 percent of parents of youth with an IEP express concern about whether their children can maintain eligibility for federal disability benefits through the Supplemental Security Income program if they get a job. To continue receiving these benefits after age 18, recipients must document they are unable to work more than a minimal amount. Thus, recipients risk losing their eligibility for benefits by getting a job. Nearly half of parents of youth with deaf-blindness (48 percent) and about one-third of those with autism and intellectual disability (35 and 27 percent) identify this risk as an employment challenge, along with more than one-quarter of parents of five other groups—emotional disturbance, hearing impairments, multiple disabilities, orthopedic impairment, and visual impairment (26 to 34 percent). Parents of youth with speech or language impairments are least likely to report these two types of employment challenges (25 and 9 percent, respectively).

**Table 30. Percentages of parents who perceive challenges for their children with getting a job after high school, by disability group**

Disability group	Staff at the high school have not provided enough information about career planning and job opportunities	Potential loss of Supplemental Security Income or other benefits
<b>Youth with an IEP overall</b>	<b>34</b>	<b>19</b>
Autism	41*✓	35*✓
Deaf-blindness	34	48*✓
Emotional disturbance	36	26*✓
Hearing impairment	33	27*✓
Intellectual disability	42*✓	37*✓
Multiple disabilities	31	33*✓
Orthopedic impairment	36	29*✓
Other health impairment	37	19
Specific learning disability	30*	11*✓
Speech or language impairment	25*✓	9*✓
Traumatic brain injury	37	20
Visual impairment	34	34*✓

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

Note: Parent survey respondents, excluding proxies, were asked whether they think each item will be an issue for youth with getting a job after high school.

Source: National Longitudinal Transition Study 2012. The universe is youth who are at least 15 years old. More information is provided in appendix F, tables F-28 and F-29.

- Among the disability groups, youth with autism are most likely to be unclear about good job matches, while those with emotional disturbance are most likely to report not receiving enough help from school with learning about careers (table 31; see tables F-30 and F-31 for more detail). Among those ages 15 and above, youth with autism are more than twice as likely as youth with an IEP overall (18 versus 8 percent) to report that knowing what kinds of jobs they would like or be good at will be a challenge for deciding what to do after high school. These findings are consistent with those described in chapter 3 indicating that youth with autism have lower reported levels of self-direction. Similar to their parents, youth with emotional disturbance are more likely than youth with an IEP overall to say that they are not getting enough help from school with learning about different careers (30 versus 23 percent). The percentages for other groups are similar to the average for all youth with an IEP.

**Table 31. Percentages of youth who perceive challenges with getting a job after high school, by disability group**

Disability group	High school staff have not helped enough with learning about different careers	Does not know what kinds of jobs would like or be good at doing
<b>Youth with an IEP overall</b>	<b>23</b>	<b>8</b>
Autism	24	18*✓
Deaf-blindness	31!	30!
Emotional disturbance	30*✓	8
Hearing impairment	26	9
Intellectual disability	23	11
Multiple disabilities	28	12
Orthopedic impairment	23	7
Other health impairment	23	8
Specific learning disability	21*	7*
Speech or language impairment	27	11
Traumatic brain injury	33	9
Visual impairment	17	8!

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

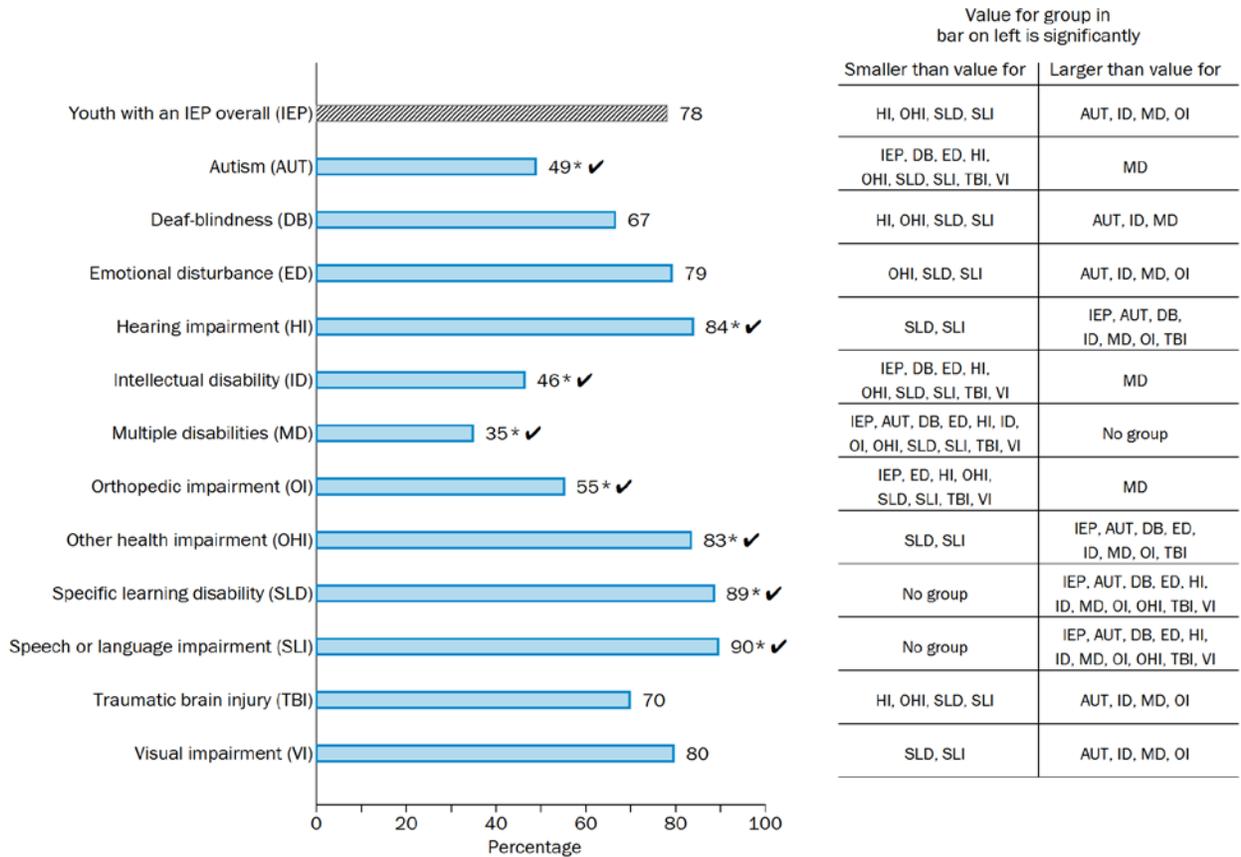
Note: Youth survey respondents, excluding proxies, were asked if they agreed that each item will be a challenge for deciding what to do after high school.

Source: National Longitudinal Transition Study 2012. The universe is youth who are at least 15 years old. More information is provided in appendix F, tables F-30 and F-31.

- Although most parents of youth with an IEP expect their children to live independently as adults, this is not the case for parents of those with autism, intellectual disability, and multiple disabilities (figure 34; see table F-32 for more detail). Overall, 78 percent of parents of youth with an IEP expect their children to live independently by age 30—that is, live on their own, with friends, with a spouse or partner, or in military housing. However, fewer than half of parents of those with autism (49 percent), intellectual disability (46 percent), and multiple disabilities (35 percent) have this expectation. In addition, only 55 percent of parents of youth with orthopedic impairments expect them to live independently. Youth are more optimistic than parents about whether they will live independently as adults, but the same four groups have lower expectations than all youth with an IEP (table F-33). Moreover, when parents were asked if they think their children will be financially self-supporting by age 30, their expectations were below average for the same four groups as well as for parents of youth with traumatic brain injuries (table F-34). These findings, in conjunction with the groups' greater difficulty performing activities of daily living, lower employment rates,

and the lower educational expectations of their parents suggest that youth in these groups may face the most significant challenges for successful post-high school transitions among all the disability groups.

**Figure 34. Percentages of youth whose parents expect them to live independently by age 30, by disability group**



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

*Exhibit reads:* Readers interested in a particular student group can follow the group’s bar in the figure to the corresponding line in the chart on the right. The chart indicates the statistically significant differences (at the .05 level) between the value of the group’s bar and the values for the other groups’ bars in the figure. For example, if the value for youth with autism is statistically smaller than the value for youth with emotional disturbance, “ED” will appear in the left-hand column of the chart. If it is statistically larger than the value for youth with intellectual disability, “ID” will appear in the right-hand column. If it is not statistically larger than the value for any other group, “No group” will appear in the right-hand column.

*Note:* Parent survey respondents, excluding proxies, were asked where they think youth will be living at age 30. The response categories were on his or her own, at home with parents, with a relative, with friends, with a spouse or partner, in military housing, in a group home, in an institution, or some other place. Independent living refers to living in on his or her own, with friends, with a spouse or partner, or in military housing.

*Source:* National Longitudinal Transition Study 2012. The universe is all youth. More information is provided in appendix F, table F-32.

### Within most disability groups, youth in low-income households and those with lower functional abilities are at greater risk in terms of their preparation for life after high school

The issues youth face in preparing for adulthood could be shaped by the interplay between their disabilities and backgrounds. As discussed earlier (chapter 2), the disability groups vary in terms of their family, personal, and school characteristics. Examining how key indicators of preparation for post-high school life vary by these characteristics, both within disability groups and for youth with an IEP overall, can illuminate which groups of youth may face more difficult transitions.<sup>43</sup>

- **Within several disability groups, those with lower incomes have lower expectations about future transition success** (table 32a; see tables F-36 to F-40 for more detail). Among all youth with an IEP, those with lower incomes are less likely to expect to obtain postsecondary education and have parents who expect them to live independently. However, both lower and higher income youth report participating in college testing and work experience at similar rates, and their parents are as likely to report their children provided input into their IEP and transition plans. These patterns for youth with an IEP overall are echoed within many disability groups, including:
  - **The lower postsecondary education expectations held by youth from low-income households is evident within five disability groups.** Seventy-three percent of youth with an IEP from low-income households expect to obtain some postsecondary education, compared with 81 percent from higher-income households. This pattern exists among those with emotional disturbance, hearing impairments, orthopedic impairments, other health impairments, and specific learning disabilities.
  - **Low-income parents are less likely than higher-income parents to expect their child to live independently within 8 of the 12 disability groups.** Among all parents of youth with an IEP, 76 percent of those with low incomes expect their child to live independently by age 30, compared with 82 percent of those with higher incomes. This difference in the expectations exists among most disability groups (except youth with deaf-blindness, intellectual disability, multiple disabilities, and visual impairments).

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<sup>43</sup> As explained previously, the small number of students in some disability groups and with some of these characteristics means that what look like differences between subgroups of students could be due to random chance. For this reason, similar to the rest of the report, two subgroups are considered different on a measure only when the difference is statistically significant and at least five percentage points in size. In addition, the text focuses on describing subgroup differences that exist for all youth with an IEP and at least one disability group.

**Table 32a. Household income groups less likely to expect and take specific steps towards post-high school success, by disability group**

Disability group	Groups less likely to:				
	Provide at least some input in IEP and transition planning (parent reported)	Expect to obtain postsecondary education (youth reported)	Take a college entrance or placement test (youth reported)	Have recent paid work experience (youth reported)	Have parent expect they will live independently by age 30 (parent reported)
<b>Youth with an IEP overall</b>		<b>Low income</b>			<b>Low income</b>
Autism				Low income	Low income
Deaf-blindness					
Emotional disturbance	Low income	Low income			Low income
Hearing impairment		Low income	Low income	Low income	Low income
Intellectual disability					
Multiple disabilities			Higher income		
Orthopedic impairment		Low income			Low income
Other health impairment		Low income			Low income
Specific learning disability		Low income			Low income
Speech or language impairment					Low income
Traumatic brain injury					Low income
Visual impairment					

A household income group is identified if it is less likely than the other household income group to expect or take specific steps towards post-high school success (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across household income groups that meet this criterion. The groups are youth in low income and higher income households.

Sources: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix F, tables F-36 to F-40.

- **In most instances where differences by race and ethnicity exist within disability groups, Black or Hispanic youth are less likely than White, Asian, or other youth (combined) to prepare for post-high school transitions** (table 32b; see tables F-36 to F-40 for more detail). Overall among youth with an IEP, those who are Hispanic are less likely to provide input in IEP and transition planning according to parents and to report having recent paid work experience. Black youth with an IEP are less likely to report having recent work experience. Similar patterns emerge within disability groups. Evidence also exists that within some disability groups, Black or Hispanic youth have lower expectations about obtaining postsecondary education or living independently but no racial and ethnic differences exist for all youth with an IEP. However, overall, those who are neither Black nor Hispanic (White, Asian, or another race) are less likely to report taking college entrance tests. Specifically:
  - **Within three disability groups, Hispanic youth are less likely than White, Asian, or other youth to provide input on their transition plans.** According to parents of youth with an IEP ages 17 and above, 51 percent of Hispanic youth provide input on their IEP and transition plans, compared with 62 percent of White, Asian, and other youth combined. Similarly, Hispanic youth are less likely to provide input than White, Asian, and other youth among those with hearing impairments, intellectual disability, and visual impairments.
  - **Black or Hispanic youth in five disability groups are less likely to have worked in the past year.** Among all youth with an IEP, recent paid work is reported by 37 percent of Black youth, 34 percent of Hispanic youth, and 44 percent of White, Asian, and other youth combined. Black and Hispanic youth have lower employment rates than White, Asian, and other youth combined among those with hearing impairments and speech or language impairments. Hispanic youth have lower employment rates than

White, Asian, and other youth in three additional groups—intellectual disability, other health impairments, and speech or language impairments.

- **In fewer than half the disability groups, Black or Hispanic youth are also less likely to expect to obtain postsecondary education or have parents who expect them to live independently.** Black youth with orthopedic impairments are less likely than White, Asian, and other youth combined to expect to obtain postsecondary education. Similarly, Hispanic youth with intellectual disability, orthopedic impairments, specific learning disabilities, speech or language impairments, and traumatic brain injuries, as well as Black youth with specific learning disabilities, are less likely than White, Asian, and other youth combined to have parents who expect them to live independently.
- **However, among youth with specific learning disabilities, those who are neither Black nor Hispanic are less likely than Black youth to take college entrance tests.** The size of the difference is 15 percentage points (42 versus 57 percent).

**Table 32b. Racial and ethnic groups less likely to expect and take specific steps towards post-high school success, by disability group**

Disability group	Groups less likely to:				
	Provide at least some input in IEP and transition planning (parent reported)	Expect to obtain postsecondary education (youth reported)	Take a college entrance or placement test (youth reported)	Have recent paid work experience (youth reported)	Have parent expect they will live independently by age 30 (parent reported)
<b>Youth with an IEP overall</b>	<b>Hispanic</b>		<b>White, Asian, other</b>	<b>Black</b>	<b>Hispanic</b>
Autism	Black				
Deaf-blindness					
Emotional disturbance					
Hearing impairment	Hispanic			Black	Hispanic
Intellectual disability	Black				
Multiple disabilities	Hispanic			Hispanic	Hispanic
Orthopedic impairment		Black			Hispanic
Other health impairment				Hispanic	
Specific learning disability			White, Asian, other	Hispanic	Black
Speech or language impairment				Black	Hispanic
Traumatic brain injury					Hispanic
Visual impairment	Hispanic				White, Asian, other

A racial or ethnicity group is identified if it is less likely than at least one other racial or ethnicity group to expect or take specific steps towards post-high school success (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across racial or ethnicity groups that meet this criterion. The groups are Black, Hispanic, and a combined group of White, Asian, and other youth.

Sources: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix F, tables F-36 to F-40.

- Females are less likely than males to be taking college entrance tests and gaining work experience** (table 32c; see tables F-36 to F-40 for more detail). In particular, females with an IEP are, on average, 5 percentage points less likely than males to report taking college tests (38 versus 43 percent) and having a recent paid job (37 versus 42 percent). Both of these gender differences exist among youth with multiple disabilities, and the gender difference in recent employment also occurs among youth with other health impairments and specific learning disabilities. Within nearly all the disability groups, male and female youth are as likely to expect to obtain postsecondary education. In addition, parents of males and females are about as likely to expect their children to live independently and to report that they provide input in their IEP and transition planning.

**Table 32c. Gender groups less likely to expect and take specific steps towards post-high school success, by disability group**

Disability group	Groups less likely to:				
	Provide at least some input in IEP and transition planning (parent reported)	Expect to obtain postsecondary education (youth reported)	Take a college entrance or placement test (youth reported)	Have recent paid work experience (youth reported)	Have parent expect they will live independently by age 30 (parent reported)
<b>Youth with an IEP overall</b>			<b>Female</b>	<b>Female</b>	
Autism					
Deaf-blindness					
Emotional disturbance					
Hearing impairment					
Intellectual disability					
Multiple disabilities			Female	Female	Female
Orthopedic impairment					
Other health impairment				Female	
Specific learning disability				Female	
Speech or language impairment					
Traumatic brain injury					
Visual impairment	Male				

A gender group is identified if it is less likely than the other gender group to expect or take specific steps towards post-high school success (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across gender groups that meet this criterion. The groups are male and female youth.

Sources: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix F, tables F-36 to F-40.

- Across most disability groups, indicators of preparation for post-high school transition success are lower for youth who are older than 18 and still in high school, with the exception of getting jobs** (table 32d; see tables F-41 to F-45 for more detail). Specifically,
  - Within four groups, the oldest youth are less likely than younger youth to provide input for their IEP and transition plans.** Parents say that 47 percent of all youth with an IEP ages 19 or older provided input in their transitional plan during the past two years, compared with 61 percent of those ages 17 to 18, a difference of 14 percentage points. This difference in the input provided by the oldest youth occurs among youth with multiple disabilities, orthopedic impairments, traumatic brain injuries, and visual impairments.
  - Within a few groups, the oldest youth are less likely to expect to obtain postsecondary education or to take a college entrance test.** This is particularly true among youth with autism. In addition, older youth have lower educational expectations among those with hearing impairments and orthopedic

impairments. The lower proportion of older youth taking college entrance tests exists among those with multiple disabilities.

- **For youth in all but two disability groups, parents of older students are less likely than parents of younger students to expect their children to live independently.** Overall, 48 percent of parents of youth ages 19 or older who are still in high school expect their child to live independently by age 30, compared with about 80 percent of parents of the two younger age groups. This pattern exists within all the disability groups except for youth with deaf-blindness and specific learning disabilities.
- **When it comes to work experience, it is the youngest—not the oldest—youth who are less likely to have paid jobs in most disability groups.** The federal Fair Labor Standards Act sets the minimum age for non-agricultural employment at 14 and restricts the number of hours and days that 14 and 15 year olds can work. States can raise the minimum working age by enacting their own child labor laws.

**Table 32d. Age groups less likely to expect and take specific steps towards post-high school success, by disability group**

Disability group	Groups less likely to:				
	Provide at least some input in IEP and transition planning (parent reported)	Expect to obtain postsecondary education (youth reported)	Take a college entrance or placement test (youth reported)	Have recent paid work experience (youth reported)	Have parent expect they will live independently by age 30 (parent reported)
<b>Youth with an IEP overall</b>	<b>19 or older</b>	<b>19 or older</b>	<b>19 or older</b>	<b>14 or younger</b>	<b>19 or older</b>
Autism		15 to 18 19 or older	19 or older	14 or younger	19 or older
Deaf-blindness					
Emotional disturbance				14 or younger	19 or older
Hearing impairment		19 or older			19 or older
Intellectual disability				14 or younger	19 or older
Multiple disabilities	19 or older		19 or older	14 or younger	19 or older
Orthopedic impairment	19 or older	19 or older			15 to 18 19 or older
Other health impairment				14 or younger	19 or older
Specific learning disability				14 or younger	
Speech or language impairment				14 or younger	19 or older
Traumatic brain injury	19 or older			14 or younger 19 or older	19 or older
Visual impairment	19 or older			14 or younger	19 or older

An age group is identified if it is less likely than at least one other age group to expect or take specific steps towards post-high school success (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across age groups that meet this criterion. The groups are youth who are 14 years old or younger, 15 to 18 years old, and 19 years old or older.

Sources: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix F, tables F-41 to F-45.

- Within all of the disability groups, youth with lower functional abilities are at greater risk than those with higher functional abilities to not be preparing for life after high school (table 32e; see tables F-41 to F-45 for more detail). Specifically, in each disability group, a smaller proportion of those with lower functional abilities do two or more of the following: provide input on IEP and transitions plans, expect to obtain postsecondary education, take a college entrance test, have recent work experience, and have parents who expect them to live independently.

**Table 32e. Functional abilities groups (higher or lower) less likely to expect and take specific steps towards post-high school success, by disability group**

Disability group	Groups less likely to:				
	Provide at least some input in IEP and transition planning (parent reported)	Expect to obtain postsecondary education (youth reported)	Take a college entrance or placement test (youth reported)	Have recent paid work experience (youth reported)	Have parent expect they will live independently by age 30 (parent reported)
<b>Youth with an IEP overall</b>	<b>Lower</b>	<b>Lower</b>	<b>Lower</b>	<b>Lower</b>	<b>Lower</b>
Autism	Lower	Lower	Lower		Lower
Deaf-blindness		Lower			Lower
Emotional disturbance				Lower	Lower
Hearing impairment			Lower		Lower
Intellectual disability	Lower		Lower	Lower	Lower
Multiple disabilities	Lower	Lower	Lower	Lower	Lower
Orthopedic impairment	Lower		Lower		Lower
Other health impairment		Lower		Lower	Lower
Specific learning disability		Lower		Lower	Lower
Speech or language impairment	Lower		Lower	Lower	Lower
Traumatic brain injury	Lower	Lower	Lower	Lower	Lower
Visual impairment		Lower	Lower		Lower

A functional abilities index group is identified if it is less likely than the other functional abilities index group to expect or take specific steps towards post-high school success (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across functional abilities index groups that meet this criterion. The groups are youth with lower and higher functional abilities index scores.

Sources: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix F, tables F-41 to F-45.

- **School academic performance appears to distinguish youth on some indicators of their preparation for transition** (table 32f; see table F-46 to F-50 for more details). In particular, parents of youth with an IEP in lower-performing schools are less likely than those in higher-performing schools to report that their children provide input on their IEP and transition plans, and to expect them to live independently. The finding on input occurs only for youth with traumatic brain injuries. The lower expectations for youth in lower-performing schools occur only among those with other health impairments and specific learning disabilities. Youth in lower-performing schools are as likely as those in higher-performing schools to expect to attend college and to report taking college entrance tests and working while in high school.

**Table 32f. School academic performance groups (higher or lower performing) less likely to expect and take specific steps towards post-high school success, by disability group**

Disability group	Groups less likely to:				
	Provide at least some input in IEP and transition planning (parent reported)	Expect to obtain postsecondary education (youth reported)	Take a college entrance or placement test (youth reported)	Have recent paid work experience (youth reported)	Have parent expect they will live independently by age 30 (parent reported)
<b>Youth with an IEP overall</b>	<b>Lower performing</b>				<b>Lower performing</b>
Autism					
Deaf-blindness					
Emotional disturbance			Higher performing		
Hearing impairment					
Intellectual disability					
Multiple disabilities					
Orthopedic impairment					
Other health impairment					Lower performing
Specific learning disability					Lower performing
Speech or language impairment					
Traumatic brain injury	Lower performing				
Visual impairment					

A school academic performance group is identified if it is less likely than the other school academic performance group to expect or take specific steps towards post-high school success (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across school academic performance groups that meet this criterion. The groups are youth in lower performing and higher performing schools.

Sources: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix F, tables F-46 to F-50.

- In eight disability groups, youth living in cities may be at greater risk than those in other locales in terms of their preparation for their post-high school transitions** (table 32g; see tables F-46 to F-50 for more details). For example, across all youth with an IEP, a smaller proportion of youth in cities than in towns or rural areas report having recent paid work experience. This relationship is evident among those with intellectual disability and multiple disabilities. Youth in cities are less likely than those in another locale to expect or take specific steps toward post-high school success according to at least one indicator in table 32g among those with deaf-blindness, emotional disturbance, hearing impairments, orthopedic impairments, speech or language impairments, and visual impairments as well.

**Table 32g. School locale groups less likely to expect and take specific steps towards post-high school success, by disability group**

Disability group	Groups less likely to:				
	Provide at least some input in IEP and transition planning (parent reported)	Expect to obtain postsecondary education (youth reported)	Take a college entrance or placement test (youth reported)	Have recent paid work experience (youth reported)	Have parent expect they will live independently by age 30 (parent reported)
<b>Youth with an IEP overall</b>		<b>Town or rural</b>		<b>City</b>	
Autism					
Deaf-blindness					City
Emotional disturbance	City Suburb			Suburb	
Hearing impairment		City Town or rural			
Intellectual disability				City Suburb	City Suburb
Multiple disabilities	City Town or rural			City	
Orthopedic impairment				Suburb	City
Other health impairment					
Specific learning disability					
Speech or language impairment					City
Traumatic brain injury				Town or rural	Town or rural
Visual impairment	City				

A school locale group is identified if it is less likely than at least one other school locale group to expect or take specific steps towards post-high school success (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across school locale groups that meet this criterion. The groups are youth attending school in a city, suburb, or town or rural area.

Sources: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix F, tables F-46 to F-50.

- Across most disability groups, youth in schools with larger and smaller shares of students receiving special education services are preparing for post-high school success to a similar extent (table 32h; see tables F-46 to F-50 for more details). Four exceptions are youth with deaf-blindness, hearing impairments, other health impairments, and speech or language impairments, where students in schools with proportionately more special education students are less likely to expect and take steps toward postsecondary education enrollment.

**Table 32h. School special education size groups less likely to expect and take specific steps towards post-high school success, by disability group**

Disability group	Groups less likely to:				
	Provide at least some input in IEP and transition planning (parent reported)	Expect to obtain postsecondary education (youth reported)	Take a college entrance or placement test (youth reported)	Have recent paid work experience (youth reported)	Have parent expect they will live independently by age 30 (parent reported)
<b>Youth with an IEP overall</b>	<b>Larger share IEP</b>				
Autism					
Deaf-blindness					Larger share IEP
Emotional disturbance					
Hearing impairment			Larger share IEP		
Intellectual disability					
Multiple disabilities					
Orthopedic impairment					
Other health impairment		Larger share IEP			
Specific learning disability					
Speech or language impairment		Larger share IEP	Larger share IEP		
Traumatic brain injury					
Visual impairment					

A school special education size group is identified if it is less likely than the other school special education size group to expect or take specific steps towards post-high school success (a statistically significant difference of at least 5 percentage points). An empty cell means that no differences exist across school special education size group that meet this criterion. The groups are youth in schools with smaller and larger shares of students with an IEP.

Sources: National Longitudinal Transition Study 2012. Detailed information is provided in appendix A and appendix F, tables F-46 to F-50.

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