Special Education in America

The state of students with disabilities in the nation’s high schools

Christopher B. Swanson, Ph.D.

Director
Editorial Projects in Education Research Center

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About This Report

This report examining special education in the nation’s high schools was prepared by the Editorial Projects in Education Research Center, which received support from the Bill & Melinda Gates Foundation. Editorial Projects in Education is a nonprofit, tax-exempt organization based in Bethesda, Md. Its primary mission is to help raise the level of awareness and understanding among professionals and the public of important issues in American education. EPE covers local, state, national, and international news and issues from preschool through the 12th grade. Editorial Projects in Education Inc. publishes Education Week, America’s newspaper of record for precollegiate education, Teacher Magazine, edweek.org, and the Top School Jobs employment resource. It also produces periodic special reports on issues ranging from technology to textbooks, as well as books of special interest to educators.

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Executive Summary

The nation’s public school systems collectively educate more than 6 million students with disabilities, about nine percent of the school-age population. Nearly one-third of those disabled students are of traditional high school age. This new report from the EPE Research Center examines a variety of challenges crucial to understanding special education in today’s high schools, including the types of educational settings in which services are provided, the diagnosis of disabilities, overrepresentation of particular student groups, school discipline, academic achievement, high school completion and transitions into adulthood.

What do we know about students with disabilities today?

More than at any other time in the history of American education, youth with disabilities receive instruction in school settings similar to those serving the general student population, continuing the trend of mainstreaming. This movement toward greater educational inclusion has resulted from decades of litigation, federal law, and local policymaking. The total number of students in special education programs is also on the rise, a development fueled in large part by rapid growth in two particular disability categories—Other Health Impairments (which includes attention deficit hyperactivity disorder or ADHD) and Specific Learning Disabilities (which encompasses a wide variety of diagnoses that do not fit under other existing classifications).

The choice of method for diagnosing disabilities remains a contentious issue. A new approach to identifying learning disabilities recognized by the 2004 reauthorization of the federal Individuals with Disabilities Education Act (IDEA)—Response to Intervention or RTI—has emerged as an alternative to traditional discrepancy-based models. The severity of disabilities generally falls along a wide continuum. As a result, it can prove difficult to accurately identify certain conditions or to distinguish between a student who exhibits low achievement due to a disability and one whose low performance is attributable to other factors. The sensitivity and accuracy of procedures for diagnosing disabilities are, therefore, critical factors in the provision of special education services.

Controversy over the rates at which certain demographic or socioeconomic groups are represented within the population of students with disabilities remains a prominent feature of public debates over special education. This report and other research consistently find that particular student groups are much more likely to be enrolled in special education programs. African Americans students are identified with disabilities 40 percent more often than the national average and are twice as likely to receive diagnoses for mental retardation and emotional disturbance. Native Americans are also numerically overrepresented in special education, while Asian Americans are underrepresented. White and Hispanic students fall close to the national average. Across racial and ethnic groups males are diagnosed with disabilities at two times the rate of female students. Research demonstrates clear patterns of numerical overrepresentation for certain groups. However, much less is known about the more complex dimensions of the phenomenon, including the underlying patterns of risk for experiencing a disability (which may differ across subgroups) and the implications of local variations in diagnostic and referral procedures.

In terms of school experiences and outcomes, special education students are generally more likely to become involved in major disciplinary incidents like suspensions and expulsions than are their peers in general education programs. Likewise, students with disabilities attain significantly lower levels of academic performance than the average student. In both cases, however, we observe a great deal of variation within the special education population, with certain disability classifications much more likely to be associated with negative educational outcomes. Such achievement gaps have gained new salience given the rise of performance-based school accountability and the increasing inclusion of students with disabilities in both federal and state testing and accountability systems.
Completing high school and transitioning into adulthood represent critical stages of life for all young people. Students with disabilities, like their peers, aspire to take part in a wide range of activities as they leave high school and enter adult life. Yet, our analysis shows that students with disabilities graduate from high school at lower rates than their peers. In addition, compared with the general student population, those disabled student who do finish high school appear to be more likely to earn an alternative credential as opposed to a regular diploma. Once they are out of high school, students with disabilities follow a wide variety of paths. Nearly 8 in 10 of those young adults engage in some form of activity related to employment or postsecondary education, with many pursuing both. Such a diverse range of outcomes poses significant challenges for the secondary education programs charged with preparing students with disabilities for the transition into adult life.

How can we strengthen special education for tomorrow’s students?

A number of concerns repeatedly surfaced in our investigation of the factors that define the state of special education in the nation’s high schools. We believe that attention to these issues can help to strengthen the future efforts of both policymakers and educators.

Knowledge is Power—Detailed, high-quality data on the population of students with disabilities represents a critical foundation of knowledge necessary to inform the broader enterprise of special education, through monitoring and evaluating the quality of services, tracking the outcomes of students with disabilities, setting realistic but meaningful expectations for performance, and developing more effective and well-calibrated approaches to policymaking and school-based practice.

Filling in the Gaps—Attempts to gain a deeper understanding of the experiences of high school-age special education students continue to be hampered by two central factors. First, widely accessible data and research on students with disabilities tend to deal with very broad age ranges, which makes it difficult (if not impossible) to focus specifically on high school-age students. In addition, those studies and data collections often involve only the disabled population. While such sources—to varying degrees—provide valuable insights on students with disabilities, they may offer no way to directly compare their experiences with those of the general, nondisabled student population.

Appreciating Diversity—The disabled population is clearly not monolithic. Across virtually any dimension that can be examined, we find significant differences in outcomes and experiences. In particular, such considerations as the type and severity of an individual’s disability appear to reach into every aspect of life. Nonetheless, students with disabilities are often discussed by the public and treated by policy as if they were a homogenous group with a common set of capabilities and needs. The next generation of educational policy and practice should be guided by a more enlightened understanding of diversity within the population of individuals with disabilities.

Opening the Black Box—In some respects, this report on special education at the high school level may be noteworthy for what it has not been able to examine. For example, not much has been said regarding the specific types of services received by special education students or their quality. The reason for this omission is that surprisingly little is really known. Federal and state agencies routinely collect data about the inputs and outputs of special education, the characteristics of students with disabilities and certain outcomes. But comparatively scant attention has been devoted to systematically understanding the process through which special education services are delivered and the effectiveness of those services. As is true more generally of American education, what goes on within the schoolhouse—whether in a mainstream classroom or a pull-out session for students with disabilities—has long been considered an exclusive purview of local educators. Efforts to accurately identify and diagnose students with disabilities, to ensure that appropriate services are planned and delivered, to evaluate the quality of services, and to develop and disseminate effective interventions can progress only so far until a concerted and broad-based effort is made to truly open the proverbial black box and examine actual the process and practice of special education.
A Portrait of High School Special Education

More than 6 million students with disabilities receive services in federally-supported special education programs. That constitutes about nine percent of the nation’s school-age population. Nearly one-third of those students with disabilities are of traditional high school age (14 to 17). As is true at all ages, students who receive special education at the high school level display a broad spectrum of conditions that range from learning disabilities to visual and hearing impairments to emotional disturbances. The severity of those conditions and the extent to which they impact an individual student’s ability to learn in school also vary considerably, both across and within particular disability classifications.

Societal perspectives on disabilities have evolved a great deal over time, as has the treatment of youth with disabilities inside and outside formal educational settings. For instance, efforts to bring greater numbers of students with disabilities into the mainstream of the education system gained momentum as the civil rights movement sought to expand educational opportunities for historically-underserved groups more generally. In later years, as part of the broader standards-based reform movement and in reaction to growing public concern regarding the academic achievement and life outcomes of those students, the focus of policy activity shifted from ensuring a basic right to an education to improving access to the general education curriculum and holding public school systems more accountable for the educational opportunities provided to students with disabilities.

This report provides an overview of several key issues central to understanding special education in the nation’s high schools.

- Educational settings
- Diagnosing disabilities
- Disproportionate representation
- School discipline
- Academic achievement
- High school completion
- Transitions to adulthood

All of those factors shape the experiences of students receiving special education services in American high schools. However, some issues prove to be unique to or especially salient for adolescents and young adults: disciplinary referrals, completing high school, and transitions to further education or employment.

Profile of the Disabled Student Population, 2006

Educational Settings

Knowledge Base

Throughout much of the nation’s history the disabled were viewed as “uneducable” and routinely barred from attending public schools. Youth with disabilities were typically housed within institutionalized settings, kept at home, or did not receive formal educational services of any kind. As recently as 1970, only about 20 percent of children with disabilities received a public education. Those who attended school were routinely taught apart from other students, with little if any parental input into their educational planning or placement decisions. In recent years, the educational environments of youth with disabilities have changed dramatically, with 97 percent of those students currently served in regular schools.

Significant changes in public policy started to take hold during the 1950s and 1960s, when incremental legislative efforts were enacted, aimed largely at providing funding and trained personnel to teach students with disabilities. In 1966, for instance, the Bureau for the Education of the Handicapped was created under the auspices of the Elementary and Secondary Education Act (ESEA), the federal government’s most comprehensive law governing public education at the precollegiate level. During the 1970s, major federal legislation strengthened the rights of disabled individuals in general and students in particular and guaranteed greater access to public services for these groups. The legacies of these laws can still be felt today as their original statutory foundations have been periodically revised, reauthorized, and extended during the intervening decades.

Despite those strides, some advocates believed that many students with disabilities were still not enjoying full participation in public education or receiving adequate educational services. Adopting the tactics of the civil rights movement, advocates for the disabled turned to the judicial system for remedies. Consequently, a number of the major developments in the provision of special education services have emerged as the result of such litigation. Over the past several decades the dominant trend in special education can be characterized as a move in the direction of mainstreaming. In other words, legislative action and litigation have compelled schools to serve students with disabilities within regular educational settings to the greatest extent possible.

Educational Environments of Students with Disabilities (Fall 2006)

Advocacy in the area of special education is particularly dependent on the legal frameworks of statute and case law. The milestone legislation and litigation that have provided students with disabilities with firm guarantees to a free and appropriate public education emerged as a result of advocacy tactics and concepts held in common with the broader civil rights movement. For example, the legal rights of student with disabilities—much like those of racial and ethnic minorities—are grounded in the equal protection provisions of the Fourteenth Amendment to the U.S. Constitution. But in addition to offering an abstract justification for equal protection and equal access to public education services, these legal supports also provide individual families with the standing and concrete means to advocate on behalf of their children’s interests.

Key Issues

**Self-Contained Settings**—Today, students with disabilities are more likely to be educated in regular classrooms with the general student population than was the case for past generations of youth. However, some students continue to be served in more specialized or self-contained environments. About one out of every five special education students spends more than 60 percent of school hours outside of a regular classroom, in such settings as self-contained classes for students with disabilities, individual or group pull-out sessions, or resource rooms. An additional three percent of students with disabilities are served entirely outside of regular classroom environments, in specialized schools or residential facilities, at home, or within hospitalized settings.

**Least Restrictive Environment**—The concept of the least restrictive environment (LRE), a core principle in the provision of special education, has been a tenet of federal law since the Individuals with Disabilities Education Act took effect in 1975. The basic idea underlying LRE is that students with disabilities should be educated with nondisabled students to the maximum extent possible. Students with disabilities should only be removed from the regular educational environment (e.g., placed in special classes or separate schools) in circumstances where the nature of a student’s disability precludes effective instruction even with the use of supplementary aids and services. The terms used to describe LRE, such as mainstreaming and inclusion, have changed over time along with the focus of ongoing policy and programmatic efforts to maximize the integration of students with disabilities into general educational settings.

**Mainstreaming**—During the 1990s, the least restrictive environment was typically discussed in terms of the mainstreaming of special education students. The goal of mainstreaming is to educate as many students with disabilities as possible in the regular classroom. Mainstreaming advocates argue that students with disabilities will benefit from learning the general curriculum and attending classes with their nondisabled peers. Others, however, contend that settings outside the regular classroom can be beneficial, as they provide many students with the supports and resources necessary to learn and succeed. Since individual students with disabilities possess distinct sets of strengths and weaknesses, it is argued that their educational needs and the services and settings most appropriate to meet those needs will likewise vary.

**Inclusion**—The term typically used to describe LRE today is inclusion. Although in practice that term is often used interchangeably with mainstreaming, these two expressions can also convey differences in the degree to which students with disabilities are integrated into a regular classroom setting. Inclusion generally connotes a greater level of integration, where the presumptive placement for students with disabilities is the general education setting. For example, inclusion might call for students with disabilities to be taught in the regular classroom with limited accommodations from additional teachers. By comparison, mainstreamed students might receive substantial services outside of a regular classroom setting (individually or with other students with disabilities), joining the general student population on a more limited basis for certain subjects or non-academic periods.
Special Education Milestones
Selected Legislation and Litigation

1965 – Elementary and Secondary Education Act – ESEA
Major federal education law became statutory basis for early legislation on students with disabilities.

1970 – ESEA Amendments
Education of the Handicapped Act established as Title VI of ESEA

1974 – Education Amendments of 1974
First mentions appropriate education for all children with disabilities

1975 – Education for All Handicapped Children Act - EHA
Reauthorization of EHA, becomes stand-alone law and basis for federal funding of special education. Introduces key concepts: right to a free appropriate public education; every disabled student to receive an individualized education program (IEP); disabled students taught in least restrictive environment.

U.S. Dist. Ct. Dist. of Columbia Services must be provided regardless of district’s ability to pay.

1980 – Mills v. Board of Education
U.S. Dist. Ct. Dist. of Columbia Services must be provided regardless of district’s ability to pay.

1983 – EHA Amended


1986 – EHA Amended

1987 – Brookhart v. Ill. State Board of Ed.
U.S. Dist. Ct. Dist. of Columbia Students with disabilities entitled to free public education program in least restrictive environment.

1988 – Honig v. Doe
U.S. Supreme Court Children protected from expulsion for misbehavior resulting from their handicaps.

1990 – Individuals with Disabilities Education Act - IDEA
Reauthorization of EHA, confirms and enlarges the scope of the 1975 legislation.

U.S. Supreme Court Children entitled to related services if essential to attending school.

U.S. Supreme Court First Supreme Court decision on special education.

1993 – Cedar Rapids v. Garret F.
U.S. Supreme Court Parents entitled to reimbursement for private placement if public school fails to provide appropriate education.

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U.S. Supreme Court Party challenging an IEP must prove its case.

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2006 – Arlington Central Sch. Dist. v. Murphy
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Other Key Legislation for Persons with Disabilities

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Policy Context

*Education of All Handicapped Children’s Act of 1975*—This law represents the first piece of major stand-alone federal legislation addressing the rights of students with disabilities to a public education. It ensured due process to students and their families, while affirming that children with disabilities should be taught in the main stream of the regular classroom except when learning cannot be achieved in such a setting, even with the use of supplementary aids and services.

*Individuals with Disabilities Education Act (IDEA)*—A reauthorization of the 1975 act, IDEA initially took effect in 1990 and was subsequently reauthorized in 1997 and 2004. IDEA is the premier federal legislation governing the delivery of special education services in the nation’s public schools. The law regulates the provision of individualized education programs (IEPs), the administrative mechanism through which the needs of students with disabilities are assessed and appropriate educational services are identified.

*No Child Left Behind Act (NCLB)*—The 2002 reauthorization of the omnibus federal law in the area of elementary and secondary education, NCLB combines strong mandates for school accountability over student performance with the dual goals of raising achievement and closing gaps between historically high- and low-performing groups. Schools must meet performance benchmarks for their student bodies as a whole and also for specified subgroups (including students with disabilities) in order to be considered making adequate academic progress under the law.

Leverage Points

*Placement into Services*—Special education has often been the subject of litigation aimed at clarifying the responsibilities of schools and districts under the law. Nevertheless, challenges still persist in effectively balancing several competing demands—acknowledging the diverse needs of students with disabilities, providing an appropriate education, and offering maximum integration with the general education program. The rules and practices governing student placement into special education are likely to remain a key arena of debate for both policy implementation and service delivery.

*Research on Differential Settings*—Two students with similar disabilities may be served in substantially different educational settings as a result of the significant local variability that exists in placement practices and the resources available to provide services in the schools. However, little systematic information is available on those local variations. Further research is also needed on the effectiveness of differential settings and services provided to students with a given disability.

*Collaboration for Effective Teaching and Support*—The movement for greater integration of students with disabilities into the educational mainstream has created challenges for providing appropriate and effective instruction. Special education teachers must now coordinate to a greater extent with regular classroom teachers regarding individual students’ needs. Conversely, general education teachers are now more likely to be the principal providers of instruction for students with special needs, which may pose difficulties in differentiating the delivery of instruction and managing classroom behavior.

*Funding for Students with Disabilities*—Research shows that per-pupil expenditures are almost twice as high for the average special education student as for general education students ($15,030 versus $7,867 adjusted for inflation). Average spending levels for more severe, although less prevalent, disability categories can reach three times those for general education. In addition, about three-quarters of instructional spending for students with disabilities is linked to the special education services they receive (as opposed to their general education services). IDEA authorizes Congress to contribute up to 40 percent of the average per pupil expenditures for special education students, a level of federal support referred to as “fully funding” IDEA. Recent estimates, however, place the actual federal contribution at about 17 percent of per pupil costs. For a typical school district of 1,000 students, that shortfall in IDEA funding amounts to about $300,000 annually, a figure that assumes an average rate of special education services (nine percent of students). Critics argue that states and districts have essentially been
burdened with an unfunded liability and lack sufficient resources to adequately meet the needs of students with disabilities. The legal obligation to provide services to students with disabilities, juxtaposed with a scarcity of resources, may present schools and districts with difficult choices. With limited budgets, school systems may feel pressured to reduce the scope or quality of special education services, limit the numbers of students served, or divert resources from other funding categories (including dollars intended for general educational instruction).

## Diagnosing Disabilities

### Knowledge Base

From its inception, the Individuals with Disabilities Education Act (IDEA) has placed certain conditions on states in exchange for receiving federal funding. For instance, states must engage in the Child Find process, a component of IDEA that requires states to identify, locate, and evaluate all children with disabilities who are in need of early intervention or special education support. IDEA also provides due process rights to the parents of children being evaluated for or receiving special education services. Under the law, determinations as to whether a child has a disability and is entitled to enroll in a special education program are made by a multidisciplinary team that includes at least one teacher or specialist in the area of the suspected disability, with parents also involved.

States are responsible for ensuring that every student with a disability receives an individualized education program (IEP), the chief mechanism for administering the provision of educational services for students with disabilities. Created by a team of teachers and other specialists along with the child’s parents or guardian, the IEP describes the developmental, social, and learning goals for that student, which are intended to promote equal opportunity and eventual economic independence. The plans also delineate the specific services that schools must offer in order to help that student meet those goals. Those services may include specialized academic instruction and, as appropriate, such related supports as physical, speech, and occupational therapy.

The overall rate at which students have been diagnosed with disabilities has steadily increased over the past three decades. When viewed as a share of public school enrollment, recipients of special education services now comprise almost 14 percent of individuals age 3 to 21, compared with about eight percent in 1976. In the early 1990s, the federal government began to require more extensive reporting of data on students with disabilities, including more detailed disaggregation by age. Those data reveal a similar upward trend in special education placement among high school-age students. The number of students with disabilities in that age group rose by nearly 700,000 between 1993 and 2006. That amounts to a 55 percent increase in special education enrollments, more than twice the growth rate for the student population as a whole.
Three-quarters of the upward trend in diagnoses among high school-age students can be attributed to just two disability categories. Specific learning disabilities (SLD) and other health impairments (OHI) respectively account for one-half and one-quarter of the increase. The SLD category is comprised of a wide variety of diagnoses that do not fit under other existing classifications. Other health impairments (OHI) includes attention deficit hyperactivity disorder (ADHD), a widely discussed condition. A 1991 memorandum issued by the U.S. Department of Education explicitly stated that ADHD could qualify as a disability under other health impairments, a development that many believe has contributed to increasing diagnoses in that category. The prevalence of diagnosed cases of autism has also increased exponentially over the past decade. However, accounting for about 50,000 high school-age special education students nationally, autism is numerically dwarfed by a number of more frequently diagnosed conditions, including specific learning disabilities, other health impairments, emotional disturbance, and mental retardation.

For students with the most severe conditions, diagnosis and determinations regarding the need for special education services may be relatively clear-cut and often occur prior to entering school. The severity of many disabilities, however, falls along a wide continuum. As a result, it may sometimes prove difficult to identify certain disabilities or to distinguish between a student who exhibits low achievement due to a disability and one whose low performance is attributable to other factors. The sensitivity and accuracy of procedures for diagnosing disabilities are, therefore, critical factors in the provision of special education services.

Key Issues

**The Severe Discrepancy Model**—The approach traditionally used to identify learning disabilities under federal law is known as the severe discrepancy model. That classification framework identifies individuals who display large differences between cognitive ability and educational performance, as gauged respectively by measures of intelligence (e.g., IQ tests) and achievement (e.g., academic assessments). Although still the prevalent method for diagnosing learning disabilities, critics have challenged the validity of the approach. Some have also raised concerns that it may take an extended period of time—as much as several years—to firmly establish a record of underachievement, making it difficult to diagnose younger children.

**Response to Intervention**—The 2004 reauthorization of IDEA permits another procedure for diagnosing specific learning disabilities known as Response to Intervention (RTI). That strategy is based on the assumption that a youth with a learning disability will continue to fall behind, even after repeated exposure to evidence-based instruction and interventions. Largely compatible with a school’s conventional mode of delivering instruction, RTI uses a three-tier system to diagnose students with disabilities based on their response to increasingly intensive interventions: regular classroom instruction, intensified small-group instruction, and individual instruction. Students still struggling at the third tier may be considered candidates for special education services.

Policy Context

**Individuals with Disabilities Education Act (IDEA)**—The 2004 reauthorization of the main federal law governing special education introduced an alternative method for diagnosing learning disabilities—Response to Intervention. That approach can now be employed in lieu of the traditional severe discrepancies model. The method and accuracy of diagnosis is particularly important for such loosely-defined disability categories as specific learning disabilities and other health impairments, which together account for more than two-thirds of high school-age students receiving special education services.

**Litigation**—The U.S. Supreme Court has issued several recent decisions that affect key procedural aspects of the diagnosis of disabilities and administration of special education services. These include *Schaffer v. Weast* (on the burden of proof in challenges to an IEP) and *Arlington Central School District v. Murphy* (regarding parents’ ability to recoup expenses spent on experts in IEP disputes).
Leverage Points

**Increasing Prevalence or Better Diagnosis**—Much of the recent growth in special education among high school students may be attributable to a small number of specific conditions (e.g., ADHD, autism). Further investigation is needed to determine whether rising special education enrollments stem from actual changes in the prevalence of such disabilities in the youth population or result from clearer guidelines and improved methods for diagnosing those conditions.

**Specific Learning Disabilities**—Nearly six out of every ten high school special education students fall into a single administrative category, specific learning disabilities (SLD), which encompasses a number of conditions that are potentially difficult to diagnose. By comparison, no other category accounts for much more than 10 percent of all students with disabilities. Subdividing the SLD category or disaggregating publicly-reported data for specific SLD diagnoses would provide information needed to both better evaluate claims that disabilities are being over-diagnosed and better understand the full range of conditions that fall under this expansive category.

**Diagnostic Models**—The introduction of the alternative RTI approach for diagnosing disabilities marks a major development in the field of special education. The implications of this new approach for rates of diagnosis and the effectiveness of special education services should be closely monitored during the coming years.

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**Disproportionate Representation**

Knowledge Base

Controversy over the rates at which certain demographic or socioeconomic categories are represented within the population of students with disabilities remains a prominent feature of public debates over special education. More specifically, concerns have been repeatedly raised about the over-representation of particular student groups in special education programs. In principle, the idea behind overrepresentation is that a given characteristic or condition appears within a particular group at a rate higher than it “should,” relative to that group’s inherent level of risk for experiencing the condition. The converse would hold true for underrepresentation. In practice, however, the factors that determine risk for a disability are numerous, complex, highly intertwined with one another, and often difficult to observe directly or measure empirically.

![Disability Rates by Race and Ethnicity (Fall 2006)](image_url)

**African American Disability Incidence (as percent of national average)**

- Mental retardation
- Emotional disturbance
- Developmental delay
- Multiple disabilities
- Specific learning disability
- Other health impairments
- Visual impairment
- Traumatic brain injury
- Hearing impairment
- Speech-language impairment
- Orthopedic impairment
- Autism
- Deaf-Blind

As a result, researchers generally evaluate levels of group over- or under-representation solely on the basis of prevalence—that is, by comparing the rates at which disabilities are diagnosed for a particular group relative to other groups or the student population as a whole. From this perspective, the available evidence has consistently demonstrated disparities in the prevalence of special education placement rates across racial and ethnic groups and by gender.

About nine percent of all school-age individuals are diagnosed with a disability and receive special education services. Relative to that national baseline, African American and Native American students are more likely (and Asians less likely) to receive special education services than the average student. Rates of special education among Hispanic and white students are close to the national average.

Even within a group with a high prevalence of diagnosed disabilities, rates of identification for some disability categories may be dramatically higher than for others. For instance, overall, African American students receive special education services at a rate about 40 percent higher than the national average across racial and ethnic groups. However, rates of mental retardation and emotional disturbance are extremely elevated within the African American population, roughly twice the national average. Generally, disproportionate representation has been noted in high-incidence categories that involve more subjective diagnoses (e.g., mental retardation, specific learning disabilities, emotional disturbance).

Gender disparities have also become a significant concern in debates over special education placement. Males are diagnosed with disabilities nearly twice as often as female students. Data from the U.S. Department of Education’s Office for Civil Rights (OCR) on specific learning disabilities, mental retardation, and emotional disturbance show that males from every racial and ethnic group are more likely than females to be in special education. Considerable public attention has been concentrated on the high rates of disability diagnosed for minority males, especially African Americans. The incidence of mental retardation among African American males rises to 220 percent of the rate found in the general student population, with rates of emotional disturbance two and a half times the national average.

Despite the fact that males from some historically-disadvantaged groups are much more likely to receive special education services, the differential rates of diagnosis for males versus females within racial and ethnic groups are rather similar. For instance, males from all racial and ethnic groups are about 80 to 90 percent more likely than females to be diagnosed with a disability. Male-female differentials are larger for some diagnoses, although comparable across groups. For example, males are about three times as likely to be labeled emotionally disturbed as the females in their respective racial-ethnic classification. That suggests that the high prevalence of special education placement among African American males may be largely attributable to the elevated baseline levels of disability diagnosed among all African Americans, and then compounded by the elevated rates of diagnosis found among males of all racial and ethnic groups.

![Disability Rates for Race-by-Gender Categories (2006)](chart.png)
Key Issues

**Measuring Representation and Disproportionality**—A variety of empirical measures are used to assess the representation (or overrepresentation) of particular groups within the broader population of students with disabilities. Explanations and illustrations of three common metrics are provided below. Such measures can also be used to determine the representation of particular groups within specific disability diagnoses (e.g., mental retardation, specific learning disabilities).

<table>
<thead>
<tr>
<th>A Hypothetical Student Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Students with</strong></td>
</tr>
<tr>
<td><strong>Disabilities</strong></td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>African American</td>
</tr>
<tr>
<td>Latino</td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

- **Composition Index**—Percent of a population (e.g., students with disabilities) that are members of a given demographic group of interest (e.g., Latinos).
  
  *Example:* A special education population is composed of 15 individuals, distributed across demographic categories as follows—6 African American, 3 Latino, 6 white. The Composition Index for Latinos would be 20% (or 3/15 X 100).

- **Risk Index**—Percent of a particular demographic group of interest (e.g., Latinos) that are members of a given programmatic classification (e.g., students with disabilities).
  
  *Example:* Among a group of 10 Latinos, 3 are identified as students with disabilities and 7 are classified as general education students. The disability Risk Index for Latinos would be 30% (or 3/10 X 100). The disability Risk Index for this hypothetical population as a whole would be 15% (or 15/100 X 100).

- **Risk Ratio**—Compared the Risk Index for one demographic group with that of another group or the total population.
  
  *Example:* The disability Risk index values for Latinos and the student population as a whole are, respectively, 30% and 15% (see above). The Risk Ratio for Latinos would be 2.0 (or 30/15). In other words, the risk of being identified with a disability is twice as high among Latinos as among the average student in the population.

**Implicated Demographic Groups**—Most of the concern about levels of representation in special education has focused on male students and historically disadvantaged minorities. The high rates of special education among Native American and African American students are well known. However, less discussed is the fact that Hispanic and Asian students typically have lower-than-average rates of diagnosed disabilities. In fact, it could be argued that Asian students are underrepresented, with a rate of special education placement about half the national average. That suggests a complex pattern that may have both historical and cultural roots. The intersection of race and gender has also been a highly contentious issue.

**Implicated Diagnoses**—The diagnosis of mental retardation has been a centerpiece of debates concerning overrepresentation. However, some experts have also noted high degrees of male and minority representation in a number of disability categories that are considered to be relatively subjective, rather than medically diagnosed. Specifically, mental retardation, learning disabilities, and emotional disturbance are high-incidence categories that may be particularly prone to subjective diagnosis.
Numerous Underlying Causes—Determining with precision the extent to which various root causes contribute to demographic overrepresentation in special education is extremely challenging. Yet, major aspects of the overrepresentation debate will remain essentially unresolved absent a deeper understanding of those underlying causes. Factors that may potentially contribute to disabilities include, but are not limited to, the following.

- **Health issues** like prenatal care, child nutrition, and exposure to lead and other environmental pollutants
- **Underlying physiological conditions** such as the greater risk of inherited and other biological syndromes among males, which contributes to higher rates of mental retardation and attention disorders
- **Inequitable access** to quality medical and mental health services
- **Cultural values** and views of (or stigma attached to) disability
- **Bias or discrimination** along the lines of race and class, whether intentional or unconscious
- **Misdiagnosis** of behavioral problems or poor academic performance as disability
- **Inconsistent implementation** of procedures for special education referral
- **Differential ability to advocate** for students on the part of parents and educators

Policy Context

**Individuals with Disabilities Education Act (IDEA)**—The federal law provides the general framework under which publicly-funded educational services for students with disabilities are administered. IDEA also charges states with enacting policies and procedures designed to prevent inappropriate overidentification and disproportionate representation by race and ethnicity. The states, however, can exercise discretion over important aspects of the law’s implementation (e.g., determining the threshold constituting a “disproportionate” level of representation).

**Office for Civil Rights**—The mission of this branch of the U.S. Department of Education is to ensure equal access to education and promote educational excellence nationwide by enforcing civil rights. Its purview includes the enforcement of federal laws prohibiting discrimination on the basis of disability status as relates to education.

Leverage Points

**High Incidence vs. Exposure to Risk**—Much public discourse concerning “overrepresentation” actually deals with a more basic consideration—empirical “incidence” or the rate of disability diagnosis in a particular demographic group relative to the size of that group. Largely absent from these debates has been an intellectually-rigorous appreciation of representation as a function of exposure to underlying risk factors, whether physiological, cultural, or socioeconomic. Higher environmental risk within a certain population, for example, may contribute to legitimately disproportionate rates of special education placement within the public school system.

**The Data Gap**—The federal government routinely collects data about special education in conjunction with IDEA and Office for Civil Rights reporting mandates. However, those sources typically contain rather limited information about disaggregated race, gender, and race-by-gender categories. For example, disability patterns specific to high school-age students cannot be examined by race or gender because those data are reported in very broad age ranges (e.g., ages 6 to 21). More detailed, systematic, and comprehensive data collections would provide an enhanced portrait of demographic representation in special education that could better inform policy and practice.

**Research Agenda**—In tandem with better raw data, further analytic research—epidemiological, social-scientific, ethnographic—will be necessary to continually improve our understanding of the numerous factors that, independently or in combination, contribute to a disability diagnosis.

**Diagnosis and Referral**—Clearer guidelines for diagnosing disabilities and more uniform referral procedures for special education services would reduce the potential for subjective judgments often cited for certain diagnoses.

**Improvements in General Education**—Weak academic performance can sometimes be mistaken for a learning disability. Improvements in the quality of general education (particularly for younger students) could reduce special education referral rates for poor and minority students who achieve at lower levels than their peers.
School settings present a complex combination of educational, social, and behavioral situations that all students must navigate. Some youth with disabilities, especially at the high school level, may face challenges in this regard. That may be particularly true for students with such conditions as emotional disturbance or autism, which by definition involve atypical behavior. The majority of students with disabilities in high school do not experience serious behavioral difficulties at school. However, a recent report from the National Longitudinal Transition Study-2 (NLTS2) found that about one in five secondary-age students with disabilities do exhibit problems with appropriately controlling behavior or fighting with classmates. Forty-five percent of disabled youth argued with other students in class.

For any student, failure to behave in accordance with accepted school norms and rules may result in disciplinary action. These disciplinary referrals can carry serious consequences since students may be removed from the regular classroom setting for some period of time. When referrals occur repeatedly, the amount of time spent under sanction can accumulate to represent a significant loss of learning opportunities. Multiple minor infractions may also escalate, eventually resulting in suspension, expulsion, or other actions that reduce the amount of time spent in a regular learning environment.

Research shows that students with disabilities are more likely than their peers to be involved in the school disciplinary process. For instance, students with disabilities are suspended or expelled at higher rates than general education students. According to the NLTS2, one-third of special education students were suspended or expelled at some point during their school careers, compared with 21 percent of nondisabled youth. In a given year, about one of every ten students with disabilities receive multiple in-school suspensions, with one percent being expelled.

### Key Issues

**Affected Groups**—Male students as well as historically disadvantaged minorities are more often subject to disciplinary action than their female and majority white peers. This pattern prevails for the general and special education populations, with more frequent disciplinary action generally found among students with disabilities. For instance, at the secondary level, rates of suspension-expulsion are 16 percentage points higher for disabled male students than females (38 versus 22 percent). Among major racial and ethnic categories, African Americans are more likely to have ever been suspended or expelled than Hispanic or white students. The incidence of disciplinary action is consistently higher in the disabled population relative to general education students, although the size of the discipline gap varies across gender and racial categories.

**Implicated Diagnoses**—Rates of behavioral problems and disciplinary referrals differ greatly for students diagnosed with various disabilities. Within the category most often implicated, emotional disturbance, 73 percent of students have been suspended or expelled. The rate of disciplinary action is also high (41 percent) among students with other health impairments, a classification that includes attention...
deficit hyperactivity disorder (ADHD). By comparison, rates of suspension and expulsion in several disability categories fall below 15 percent, a level lower than that found in the general student population.

Policy Context

*Individuals with Disabilities Education Act (IDEA)*—In recognition of the potential connection between disability and behavior problems, provisions of the 2004 reauthorization of IDEA explicitly address this issue. When student misbehavior occurs, two separate determinations must be made. Schools must first determine whether the problem behavior was attributable to the individual’s disability. Then, schools must examine whether the misconduct was a result of the school’s failure to implement the student’s individualized education program (IEP).

Leverage Points

*Missing Data*—Some systematic information can be obtained about the rates and types of disciplinary action experienced by students with disabilities and the general student population. However, comparable statistics for those two groups can rarely be derived from the same source. Data on such issues should be regularly collected in a manner that allows for an examination of disciplinary involvement by disability category, gender, race, and age, and that enables valid comparisons between the special and general education populations.

*Monitoring IDEA Implementation*—The federal law now provides school personnel increased authority to move students with disabilities to alternative settings following infractions involving weapons, illegal drugs, and infliction of injury. The use of that authority and the potential for differential application of disciplinary policy across student groups should be carefully monitored.

## Academic Achievement

### Knowledge Base

A widely held belief exists that students with disabilities are not capable of achieving at the same levels of academic performance as their nondisabled peers. To some extent this perception is borne out by available research, at least for students with disabilities in the aggregate. However, it is also important to recognize that some disabled youth do achieve at levels equal to or even exceeding those of the average nondisabled student. In addition, academic performance varies greatly across the specific groups that comprise the broader special education population.

### Reading Achievement

<table>
<thead>
<tr>
<th></th>
<th>Nondisabled</th>
<th>Disabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>Proficient</td>
<td>5%</td>
<td>22%</td>
</tr>
<tr>
<td>Basic</td>
<td>39%</td>
<td>73%</td>
</tr>
<tr>
<td>Below Basic</td>
<td>25%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Disabled and Nondisabled 12th Graders (2005)**

SOURCE: EPE Research Center, 2008. Data from the National Assessment of Educational Progress (NAEP), U.S. Department of Education.
Perhaps the most authoritative national source of information on student performance is the U.S. Department of Education’s National Assessment of Educational Progress (NAEP), often referred to as the “Nation’s Report Card.” NAEP classifies student performance according to a series of four achievement levels: Below Basic, Basic, Proficient, and Advanced. Using NAEP, it is possible to compare the achievement of 12th graders with disabilities against the performance of general education students. In 2005, just five percent of high school seniors with disabilities performed at or above the proficient level on the NAEP reading assessment, while nearly three-quarters scored below the basic level. By comparison, nondisabled students achieved at significantly higher levels, with 36 percent reaching or exceeding the proficient mark and only one-quarter falling below basic. A similar pattern of disability-based achievement gaps emerges for 12th grade mathematics, although overall levels of performance in that subject tend to be lower than in reading.

As is often the case, however, academic performance within the special education population can vary dramatically depending on a student’s particular diagnosed disability. The National Longitudinal Transition Study-2 examined the academic and functional performance of a nationally-representative group of students with disabilities. Although the NLTS2 sampled only students with disabilities, the battery of tests administered as part of the study were nationally normed and, therefore, permit comparisons to performance benchmarks for the general youth population. Results show that, on average, 16-18 year-old students with disabilities do not perform as well as the general youth population on academic assessments. On a test of reading comprehension, only about 12 percent of students with disabilities reached the level achieved by the average member of the general student population. However, the performance of students with disabilities was strongly related to disability diagnosis. One-quarter of students diagnosed with visual impairments performed at or above national norms. But at the other extreme, less than one percent of mentally retarded students reached that mark. Tests of other academic-skill domains revealed similar patterns.

![Reading Comprehension Chart]

<table>
<thead>
<tr>
<th>Disability</th>
<th>Percent Reaching National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Disabilities</td>
<td>12%</td>
</tr>
<tr>
<td>Visual</td>
<td>25%</td>
</tr>
<tr>
<td>Other Health Impairment</td>
<td>19%</td>
</tr>
<tr>
<td>Autism</td>
<td>18%</td>
</tr>
<tr>
<td>Emotional/Behavioral</td>
<td>17%</td>
</tr>
<tr>
<td>Orthopedic</td>
<td>13%</td>
</tr>
<tr>
<td>Speech/Language</td>
<td>13%</td>
</tr>
<tr>
<td>Traumatic Brain Injury</td>
<td>12%</td>
</tr>
<tr>
<td>Hearing</td>
<td>12%</td>
</tr>
<tr>
<td>Learning Disability</td>
<td>12%</td>
</tr>
<tr>
<td>Blindness</td>
<td>9%</td>
</tr>
<tr>
<td>Deaf-Blindness</td>
<td>6%</td>
</tr>
<tr>
<td>Multiple Disorders</td>
<td>1%</td>
</tr>
</tbody>
</table>

Key Issues

**Exclusion from Assessment**—Historically, the rules governing the participation of special education students in testing programs have been determined at a local level, with guidelines varying considerably from one school, district, or jurisdiction to another. As a result, many students with disabilities have been excluded from participating in assessments intended to gauge academic proficiency. The movement in recent years toward greater inclusion of special education students in school assessment programs has provided a more complete understanding of the academic abilities of those students relative to their peers in general education programs. Even today, however, a certain proportion of the most severely disabled students may be excluded from testing or participate in alternative assessments under the terms of local or state policy.²¹

**Accommodations**—Another front in the movement to increase participation in large-scale testing programs is the provision of accommodations appropriate for a given student’s disability. Typically, a special education student’s individualized education program (IEP) will specify the particular forms of assistance (if any) that should be offered to the student to facilitate participation in state or local assessments. Such accommodations—including alternative presentation or response formats, test settings, or timing and the use of special resources—are intended to allow students with disabilities to be assessed using the same tests and performance expectations as their general-education peers.

**Modifications**—Students with profound cognitive impairments may be taught using a modified curriculum or using the standard curriculum but with modified performance expectations. In other words, the student might be presented alternative subject matter or be expected to demonstrate knowledge at a lower level of complexity or depth. For such a student, accurately assessing the acquisition of knowledge and skills may require the use of an alternate assessment that reflects a modified curriculum and/or below-grade-level performance goals.

**Accountability**—As students with disabilities continue to become more fully integrated into the mainstream of American education, the performance of this group has also increasingly factored into school accountability systems. Proponents of that trend believe this attention will help to raise academic expectations for students with disabilities and provide much-needed information on achievement gaps between disabled and nondisabled students. Others, however, caution that greater accountability stakes could inadvertently result in lower expectations for students with disabilities or less inclusion of students with disabilities in mainstream testing programs, strategies that might make it easier for schools to reach performance goals.

### Common Testing Accommodations for Students with Disabilities

<table>
<thead>
<tr>
<th>Presentation Format</th>
<th>Response Format</th>
<th>Setting Format</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directions read aloud/repeated</td>
<td>Respond in sign language</td>
<td>Take test in small group</td>
<td>Receive extended time</td>
</tr>
<tr>
<td>Assistance interpreting directions</td>
<td>Braille typewriter</td>
<td>Take test one-on-one</td>
<td>Breaks during test</td>
</tr>
<tr>
<td>Directions signed</td>
<td>Point to answers</td>
<td>Take test in study carrel</td>
<td>Test session over several days</td>
</tr>
<tr>
<td>Test items signed</td>
<td>Respond orally</td>
<td>Preferential seating (e.g., special</td>
<td></td>
</tr>
<tr>
<td>Occasional words or phrases</td>
<td>Tape record answers</td>
<td>lighting)</td>
<td></td>
</tr>
<tr>
<td>Braille version of test</td>
<td>Computer or typewriter</td>
<td>Test administered by familiar</td>
<td></td>
</tr>
<tr>
<td>Large-print version of test</td>
<td>Use template to respond</td>
<td>person</td>
<td></td>
</tr>
<tr>
<td>Magnifying equipment</td>
<td>Large marking pen</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Special writing tool</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Policy Context

*Individuals with Disabilities Education Act (IDEA)*—Since 1997, the federal law has required that students with disabilities be included in all large-scale state assessments. Testing accommodations may be provided to those students as appropriate to facilitate participation in the state’s general assessment program. The most severely disabled students may be administered an alternate assessment.

*No Child Left Behind (NCLB)*—No Child Left Behind aims to improve learning for all students and to close persistent achievement gaps between historically high- and low-performing groups, including the gap between students with disabilities and their nondisabled peers. NCLB also mandates the terms under which the performance of students with disabilities must be assessed and incorporated into statewide accountability systems. Partly in response to the stringency of the law’s initial requirements, federal regulations have subsequently permitted the states greater flexibility for students with disabilities. Those provisions allow states to assess a limited number of students with disabilities according to alternative rules, rather than using the same tests and standards applied to the general student population. Such alternate performance result can then be used when determining adequate yearly progress under the law. Specifically, states may assess up to two percent of students using alternative tests with modified performance expectations that are based on grade-level academic standards. Another one percent of students with the most significant cognitive disabilities may be tested using alternative assessments that are based on less-than-grade-level standards. In all, these rules apply to three percent of the general student population, or roughly 30 percent of students with disabilities.

Leverage Points

*Greater Attention to Disability Classifications*—Available evidence shows that the academic achievement of special education students varies considerably depending on the specific disabilities with which they have been diagnosed. However, results disaggregated by disability category are not available from such important public information sources as NAEP or state-administered achievement tests. A more finely grained perspective on disability-specific achievement would inform on-going discussions among educators and policymakers regarding appropriate performance expectations for students with disabilities and the most appropriate ways in which these students can be included in statewide testing and accountability programs.

*An Evolving Accountability Environment*—The most recent set of federal NCLB regulations on assessment and accountability for students with disabilities took effect in May of 2007, about five and a half years after the law was passed. Developments on this issue, as a result, continue to evolve. As the states implement those rules, the development of modified assessments and academic standards as well as their educational consequences for students with disabilities should be carefully monitored. Specifically, variations or inconsistencies in the ways individual states implement the federal requirements pose concerns regarding state accountability frameworks in general and their inclusion of students with disabilities in particular.

*Impact of Students with Disabilities on School Ratings*—Much of the impetus for regulatory changes in NCLB arose from complaints that schools were often failing to make adequate yearly progress under the law specifically because of low performance among students with disabilities. Although anecdotal evidence and some limited analysis exist to confirm these claims, the question merits further empirical investigation, as does the impact of the recently-extended flexibility that federal regulations now offer the states.
High School Completion

Knowledge Base

For students with disabilities, as for all youth, graduating from high school represents a critical personal and educational milestone. Finishing high school provides undeniable economic advantages in the form of steady employment and higher wages. A high school diploma also opens the door to postsecondary education, which in turn offers further returns in the workplace.

Graduation rates have risen to prominence as a national education issue during the past several years, as widely-cited studies have called attention to what has been termed a graduation “crisis” in the United States. A number of independent researchers have placed the public high school graduation rate at around 70 percent for the overall student population. While graduation rates are consistently found to be much lower for such historically underserved groups as racial and ethnic minorities, reliable and systematic data on students with disabilities have proven to be elusive.

Major controversy has arisen regarding the inconsistent—and, some have argued, often inaccurate—methods used by the states to calculate their official high school graduation rates. Comparisons of those official results with data from independent researchers suggest that state-reported statistics tend to inflate the graduation rate, although the size of that discrepancy differs across states. While concern over the accuracy of graduation rates is applicable to all student groups, two factors may make this issue especially salient for students with disabilities.

First, state efforts to monitor the performance of students with disabilities at the secondary level—including the rates at which they finish high school—are relatively new. Some key national data sources do not contain graduation data disaggregated by disability status. In addition, 12 states were unable to calculate the graduation rates of students with disabilities for the class of 2006. Among those that did, there is a tremendous range in the size of state-reported graduation gaps between disabled and nondisabled students. At one extreme, in Georgia and Louisiana, graduation rates among students with disabilities are 40 percentage points lower than for the high school population as a whole. By contrast, five states place the gap at less than five points, and Arkansas even reports a higher graduation rate for students with disabilities. In light of such an inconsistent and sometimes non-intuitive pattern, as well as the substantial number of states not reporting data, such results should be interpreted with care and generalized only with extreme caution.

Second, federal data collections have typically been designed to monitor the proportions of students with disabilities who exit school through various routes—dropping out, earning a diploma, receiving an alternative certificate, or reaching the maximum age for services. This approach to measuring exit behavior does not strictly correspond to the more familiar cohort-oriented methods for calculating graduation rates, which estimate the percent of entering high school students who earn a diploma within a specified amount of time, typically four years. Nevertheless, data on the prevalence of exit routes provide a useful perspective on the experiences of the average special education student as well as the outcomes for specific disability categories.

According to federal data collected under the auspices of IDEA, about 7 out of every 10 students with disabilities who exited high school during the 2005-06 school year left with either a regular diploma or an alternative credential (as opposed to dropping out or reaching maximum age). Alternative credentials, which include certificates of attendance and are issued by most states, account for 21 percent of all completers. High school completion rates, however, vary considerably by disability category. Students with visual or hearing impairments are the most likely to leave high school as completers, with about 85 percent earning a diploma or other certificate. At the other extreme, students diagnosed with emotional disturbance face the greatest challenges finishing high school, with only 54 percent earning a diploma or credential. To place the experiences of that latter group in perspective, it should be noted that completion rates for the emotionally disturbed are nearly 20 percentage points lower than those for students classified as mentally retarded.

In many respects, the factors associated with dropping out among students with disabilities mirror those found in the general student population. Demographics play a role, with students from lower-incomes families and members of historically disadvantaged racial and ethnic groups less likely to finish high school. In addition, a variety of school-related factors have also been implicated in placing students at risk for dropping out of high school.

- Dislike of school
- Poor relationships with teachers and students
- High levels of absenteeism
- Poor academic performance
- Low grades
- Failing courses
- Retention in grade
- Behavioral problems
- Serious disciplinary infractions
- Suspension and expulsion
- Poor teaching
- Low expectations
- Social isolation

While a similar array of potential influences can be enumerated for students as a whole, certain factors may well prove to be particularly strong predictors of dropout among students with disabilities. Direct evidence on that question, however, remains very limited.
Key Issues

Graduation Requirements—State education agencies possess the authority to determine what it takes for a student to earn a high school diploma. In most cases, graduation requirements are defined primarily in terms of accumulating a specified number of course credits in academic subjects, while five states leave such decisions to local educators. Twenty-three states required students in the class of 2008 to pass a high school exit exam to earn a diploma. States also have the prerogative to establish alternative routes, waivers, and other exceptions to the standard graduation policy. In fact, most of the states with exit exams (20 of 23) allow for an appeals process or an alternative path to a diploma for students failing the test. Such policies are sometimes designed specifically to meet the needs of students with disabilities. Even when they are not, such policies are salient for students with disabilities, as they tend to score below average on academic assessments.

Multiple Completion Credentials—in addition to setting requirements for a diploma, states can also issue other high school completion credentials to students who exceed or fall short of the standard expectations for graduation. For the high school class of 2008, most states offered at least one additional credential other than the standard high school diploma. Twenty-four states issued advanced diplomas or other official recognition for students who surpassed the regular graduation requirements. Twenty-six states and the District of Columbia offered an alternative credential for those failing to meet all standard requirements. Sixteen of those states provided a combination of advanced and alternative options. Disability status emerges as the criterion that most frequently qualifies students for non-diploma credential, a provision found in the majority of states with an alternative certificate. In eight additional states, the authority to determine eligibility for receiving a certificate rests with local school officials, who may take disability status into account.

Policy Context

No Child Left Behind (NCLB)—In addition to requiring school accountability based on performance on academic assessments, the federal law also requires states to hold their high schools accountable for the rates at which students graduate with a standard diploma. This provision for a second performance indicator was intended to safeguard against schools “pushing out” students who score poorly on the required tests. States must calculate and publicly report graduation rates for all students and for specific subgroups of students (including those with disabilities). However, states are not currently required to take subgroup graduation rates into account as part of their main process for determining whether schools and district make adequate yearly progress. This lack of mandated accountability for disaggregated graduation rates has raised concerns that the law may not provide sufficient protection against push-out for students with disabilities and other historically low-performing groups.

State Education Agencies—Even with a growing federal role in public schooling, state-level agencies retain authority over most aspects of educational policy. With respect to high school graduation, for example, the states decide: what it takes to earn a diploma, including the decision to institute an exit exam; which alternative routes, waivers, and exceptions to allow, if any; whether to offer additional completion credentials, and the requirements for those advanced and alternative certificates; how to calculate graduation rates; how high to set graduation-rate targets for school accountability purposes; and what consequences will follow for schools not meeting those goals. The influence of state policy proves to be especially strong for students with disabilities since this group is likely to factor explicitly or implicitly into the rules governing alternative routes to the standard diploma and eligibility for non-diploma credentials.

Local Authorities—While state policy and, to a lesser extent, federal law constitute the framework governing high school graduation, school districts and local educators are ultimately responsible for implementing these requirements. For students with disabilities, involvement in state testing programs is governed by the terms of their individualized education programs (IEPs), which are developed by school-based staff in collaboration with parents. In many states, district and school officials also enjoy considerable leeway to issue waivers that could qualify students with disabilities for alternative routes to a diploma or for a certificate of attendance or other non-diploma credential.
Leverage Points

Developing Realistic Expectations—There is a common perception that performance expectations for students with disabilities are, and should legitimately be, held at a lower level than those for nondisabled students. In some quarters such as tested achievement, evidence clearly points to lower average performance for students with disabilities, although with a wide range of results depending on disability category. In other areas, however, the pattern is less clear. With respect to high school completion, for example, some data show that students with disabilities finish high school at rates comparable to their nondisabled peers, at least if non-diploma credentials are counted. But the evidence on this point is mixed and complicated by heated debates over methodology. More reliable, high-quality data and analysis of graduation patterns for students with disabilities will provide a firmer basis for developing realistic expectations for students with disabilities as a whole and for specific segments of the special education population.

More Public Disclosure—Although required by a federal law now in effect for nearly seven years, some states are still failing to report graduation statistics for students with disabilities that are comparable to those released for the general population and other subgroups. Until such information becomes freely available, we will continue to face significant challenges in gauging the performance of students with disabilities on this critical outcome and evaluating the effectiveness of the services these students receive.

Investigating Alternative Credentials—Although no systematic studies have examined the issue, available evidence suggests that students with disabilities are more likely to complete high school with a non-diploma credential than are their nondisabled peers. Such a pattern seems reasonable, since alternative-credential routes have been developed specifically for students with disabilities in a number of states. However, much remains substantially unknown regarding: the rate at which students with disabilities receive these certificates (relative to the general population), the differential standards and expectations that may apply for students with disabilities, and the consequences of receiving a non-diploma credential. For instance, students with disabilities might face diminished prospects for postsecondary access and desirable employment if alternative credentials are not highly valued by college officials or employers.

Transitions to Adulthood

Knowledge Base

The transition from high school into adulthood—whether an individual is bound for work, further education, or both—is a challenging stage of life for many young people. Difficulties in managing this transition may prove especially daunting for some disabled youth because of the additional demands of the cognitive, emotional, social, or physical limitations they face. However, the school-based special education services that youth with disabilities receive are intended to provide additional support to mitigate these challenges. Specifically, IDEA requires schools to engage in transition planning for students with disabilities so that their IEPs: identify appropriate employment and other post-school adult living objectives; provide referrals to appropriate community agencies; link the students to available resources including job placement and other follow-up services; and assign a responsible party to oversee each transition activity. The breadth of such transition planning is crucial since students with disabilities may (and, in fact, do) find themselves in any number of settings after high school.

Students with disabilities, like their peers, aspire to take part in a wide range of activities as they leave high school and enter adult life. These might include: finding and holding down a job, going on to college, training in a vocational field, engaging in civic life, living independently, maintaining fulfilling relationships, and starting a family. Young adults with disabilities experience all of these outcomes, although not necessarily to the same extent as the general population.
Findings from NLTS2 show that within two years of leaving high school, nearly 8 in 10 young adults with disabilities have engaged in some form of activity related to employment or postsecondary education. More than half worked exclusively or participated in job training, while 1 in 5 were involved in both work and further education. Less than five percent pursued postsecondary education without also working. All in all, nearly one-third of disabled young adults had enrolled in some form of postsecondary education, with three-quarters of this group attending a two-year community college or vocational or technical school. This pattern indicates a lower level of postsecondary matriculation and a lower rate of four-year (versus two-year) college enrollment for individuals with disabilities, relative to the general population of young adults.

In the first few years following high school, 43 percent of disabled young adults were employed for pay, a rate lower than the general population. The vast majority of employed disabled youth were working full time (at least 35 hours per week) and earning more than $7 an hour. In all, more than 90 percent of those workers earned above the minimum wage, averaging $7.30 an hour.

The path toward independent adult living in the years after school may be traversed in incremental steps by those with disabilities. During the early adult years, relatively few disabled individuals (15 percent) find themselves in independent residential settings—living alone, with a spouse or partner, in a college dorm, or other such arrangement outside a parent’s or relative’s home. However, two-thirds of those young adults have a driver’s license and 18 percent have their own credit card or charge account. Like the typical person entering adulthood, individuals with disabilities spend a significant amount of their free time with friends and engaging in social activities. Slightly more than half report seeing friends on at least a weekly basis. Twenty-eight percent of disabled young adults also participate in community groups, with a similar number engaged in volunteer activities. And nearly two-thirds (64 percent) are registered to vote, a figure comparable to the general population.

**Key Issues**

**Transition Planning**—For high school students diagnosed with disabilities and receiving services under IDEA, the process of preparing for the transition to adulthood begins by age 16. A formal transition plan is developed by a team that includes: the student and parents, special and general education teachers on the student’s IEP team, related service providers, and, as appropriate, administrators and transition specialists knowledgeable about resources and adult services in the community. In some cases, the team also includes representatives of organizations that traditionally have provided post-school services, such as vocational rehabilitation and mental health agencies and independent living centers. Once the transition plan is developed, it then becomes a formal part of the student’s IEP. Much like the more comprehensive IEP, the transition plan is intended to be tailored to the individual needs, strengths, and limitations of the student. As a result, the services delineated in the plans and the outcomes they are intended to produce vary widely from student to student and across disability categories.
**Differential Outcomes after High School**—In light of the findings highlighted earlier in this report, it is perhaps not surprising to find that post-schooling experiences differ considerably within the larger population of disabled young adults, much as was observed for behavioral problems, academic achievement, and high school completion. An individual’s particular disability diagnosis appears to play a large role in shaping the course into adult life. For instance, young adults with hearing or visual impairments show relatively strong academic and social-involvement profiles, although they tend to be less engaged in employment. By contrast, the lowest rates of engagement in employment and postsecondary schooling are found among mentally retarded young adults. As is true for the general population, the way in which students with disabilities exit high school also holds important implications for the future. For instance, disabled young adults who earn a diploma or completion certificate are much more likely to enroll in postsecondary education than those who drop out of high school.

**Policy Context**

**Individuals with Disabilities Education Act (IDEA)**—Students with disabilities may receive services under IDEA until they reach the age of 21. The federal law also mandates that transition plans preparing for life after high school must be developed for all students with disabilities. Those plans, which become part of the student’s IEP, are created jointly by the student and parents, the IEP team, and other educational and social service professionals experienced with the particular supports deemed necessary for a successful transition to adult life.

**Leverage Points**

**Dropout and Transition**—High school students with disabilities are guaranteed access to an individualized transition plan under federal law. However, many of those students drop out before they are able to fully engage in and benefit from planned transition services. In addition to ensuring that these school-based services are carefully tailored to student needs, faithfully executed, and achieve their intended goals, it is also important to consider other strategies for delivering services and support to high school-age students who have already left school.

**Keeping Pace with a Changing World**—Workplace environments are rapidly evolving as the result of technological advances, globalization of the economy, and myriad other developments that continually shape and reshape the economy. While all youth must be provided with the educational opportunities and other supports necessary to prepare for a successful adult life, particular challenges exist for students with disabilities. The vocational training and job preparation that students with disabilities receive in high school must remain relevant and keep pace with the changing demands of the workplace and expectations of employers. In addition, since access to good, stable jobs increasingly requires some education past high school, every effort should be made to enable young adults with disabilities to pursue and succeed in postsecondary education. This might include studying at a technical, two-year, or four-year institution.

**Preparing for Dual Transitions**—Over the past several decades, increasing numbers of young adults have been engaged in both paid employment and postsecondary education during the years following high school. The same pattern is found among both nondisabled individuals and those with disabilities. Transition services provided during high school have traditionally been oriented around preparing special education students either for work or for further schooling. It has become increasingly clear that transition planning must incorporate supports to prepare youth for both paid employment and postsecondary education, as well as the challenges they may encounter attempting to juggle both at the same time.
Conclusions—Directions for Policy and Practice

This report has served to highlight a variety of critical topics that define the state of special education in the nation’s high schools. Several of these issues have emerged repeatedly and can serve as key themes for guiding the future efforts of both policymakers and educators.

Knowledge is Power—Detailed, high-quality data on the population of students with disabilities represents a critical foundation of knowledge necessary to inform the broader enterprise of special education, through monitoring and evaluating the quality of services, tracking the outcomes of students with disabilities, setting realistic but meaningful expectations for performance, and developing more effective and well-calibrated approaches to policymaking and school-based practice.

Filling in the Gaps—Attempts to gain a deeper understanding of the experiences of high school-age special education students continue to be hampered by two central factors. First, widely accessible data and research on students with disabilities tend to deal with very broad age ranges, which makes it difficult (if not impossible) to focus specifically on high school-age students. In addition, those studies and data collections often involve only the disabled population. While such sources—to varying degrees—provide valuable insights on students with disabilities, they may offer no way to directly compare their experiences with those of the general, nondisabled student population.

Appreciating Diversity—The disabled population is clearly not monolithic. Across virtually any dimension that can be examined, one finds significant differences in outcomes and experiences. In particular, such considerations as the type and severity of an individual’s disability appear to reach into every aspect of life. Nonetheless, students with disabilities are often discussed by the public and treated by policy as if they were a homogenous group with a common set of capabilities and needs. The next generation of educational policy and practice should be guided by a more enlightened understanding of diversity within the population of individuals with disabilities.

Opening the Black Box—In some respects, this overview of special education at the high school level may be noteworthy for what it has not been able to examine. For example, not much has been said regarding the specific types of services received by special education students or their quality. The reason for this omission is that surprisingly little is really known. Federal and state agencies routinely collect data about the inputs and outputs of special education—the characteristics of students with disabilities and certain outcomes. But comparatively scant attention has been devoted to systematically understanding the process through which special education services are actually delivered and the effectiveness of those services. As is true more generally of American education, what goes on within the schoolhouse—whether in a mainstream classroom or a pull-out session for students with disabilities—has long been considered an exclusive purview of local educators. Efforts to accurately identify and diagnose students with disabilities, to ensure that appropriate services are planned and delivered, to evaluate the quality of services, and to develop and disseminate effective interventions can progress only so far until a concerted and broad-based effort is made to truly open the black box and examine the process and practice of special education.

<table>
<thead>
<tr>
<th>Types of Special Education Services</th>
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<tr>
<td>• Assistance from a tutor, reader, or interpreter</td>
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<tr>
<td>• Speech therapy</td>
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<tr>
<td>• Occupational therapy</td>
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<tr>
<td>• Life-skills training</td>
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<tr>
<td>• Personal counseling or therapy</td>
</tr>
<tr>
<td>• Transportation assistance</td>
</tr>
<tr>
<td>• Physical therapy</td>
</tr>
<tr>
<td>• Hearing-loss therapy or audiology</td>
</tr>
<tr>
<td>• Job counseling or training</td>
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Endnotes

1 These figures and other related statistics presented in this report are based on an EPE Research Center analysis of data from the U.S. Department of Education’s Office of Special Education Programs (OSEP). Those data are collected annually and reported to Congress by OSEP as required by the Individuals with Disabilities Education Act (IDEA). Detailed data tables can be accessed online at www.ideadata.org. At the time this report was produced, the most recent information available was for the Fall of 2006.


6 President’s FY 2009 Budget Request for the U.S. Department of Education (February 2008).


8 EPE Research Center analysis of data from the U.S. Department of Education, Office of Special Education Programs.

9 A specific learning disability is defined under federal law as “a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain function, dyslexia, and developmental aphasia (34 Code of Federal Regulations §300.7(c)(10)).”


13 In this context, “school age” refers to individuals age 6 to 21. Through IDEA, the federal government routinely collects disaggregated data for specific racial and ethnic groups. However that information is available for only two broad age ranges: 3 to 5 and 6 to 21 years of age.

14 The disaggregated statistics for gender and race-by-gender categories presented in this report were obtained from the U.S. Department of Education’s Office for Civil Rights (OCR). The information reported by OCR is not directly comparable to other data used in this report, which are collected by the federal government under the auspices of IDEA. According to 2006 data from OCR, 9.2 percent of male students in public schools received special education services, compared with 5.1 percent of females. 2006 Civil rights data collection, Projected values for the nation. Washington, DC: U.S. Department of Education, Office for Civil Rights.


16 Racial inequity in special education. (Losen & Orfield 2002).


18 Facts from NLTS2: School behavior and disciplinary experiences of youth with disabilities (SRI International 2006).
The graduation rate crisis numbers and students lose.


IDEA data also reveal a wide range in the proportion of students receiving alternative credentials (versus diplomas) across disability categories. Twelve percent of high school completers with speech-language disabilities earn alternative credentials, compared with half of those diagnosed as mentally retarded.


For instance, 30 percent of disabled 12th graders (about three percent of the total student population) were excluded from the 2005 NAEP Reading assessment. While NAEP policies are intended to maximize the participation of students with disabilities, the ultimate decision to include (or exclude) an individual student is made by school-level staff adhering to local practices.


23 This figure is based on an EPE Research Center analysis of data from the Consolidated State Performance Reports submitted to the U.S. Department of Education under the terms of NCLB. Even greater numbers of states failed to report graduation rates for low-income students and English-language learners (18 and 16 states respectively). Historically, few states had collected data disaggregated by such student subgroup classifications. Such detailed reporting is now mandated by NCLB and, as a result, the number of states in compliance with those reporting requirements has been rapidly increasing. In 2005, for example, 22 states failed to report graduation rates for students with disabilities.

24 IDEA data also reveal a wide range in the proportion of students receiving alternative credentials (versus diplomas) across disability categories. Twelve percent of high school completers with speech-language disabilities earn alternative credentials, compared with half of those diagnosed as mentally retarded.


27 For more information on state graduation requirements and high school completion credentials, see Diplomas Count 2008: School to College: Can state P-16 councils ease the transition? (Bethesda, MD: Editorial Projects in Education, 2008).


31 In a special analysis, the EPE Research Center compared data from IDEA and the Common Core of Data for the 2004-05 school year. Results showed that 22 percent of disabled high school completers earned an alternative certificate, compared with just two percent of all public high school students nationwide. Inconsistencies in definitions and reporting requirements across such databases, however, preclude a more definitive interpretation of such findings without an in-depth investigation.


35 Extensive information on the post-schooling outcomes of youth with different disability diagnoses can be found in After High School (Wagner & al. 2005).
RESOURCE APPENDIX

Organizations

Federal Agencies

U.S. Department of Education, Office of Special Education Programs (OSEP)
OSEP is dedicated to improving results for infants, toddlers, children, and youth with disabilities, ages birth through 21, by providing leadership and financial support to assist states and local districts and by administering the Individuals with Disabilities Education Act (IDEA).
Online at: www.ed.gov/about/offices/list/osep

U.S. Department of Education, Office of Special Education and Rehabilitative Services (OSERS)
OSERS provides a wide array of supports to parents, individuals, school districts, and states in three main areas: special education, vocational rehabilitation, and research.
Online at: www.ed.gov/about/offices/list/osers

U.S. Department of Education, National Center for Special Education Research (NCSER)
NCSER sponsors a comprehensive program of special education research designed to expand the knowledge and understanding in the field of infants, toddlers, and children with disabilities.
Online at: ies.ed.gov/ncser

Non-Governmental Organizations

Association on Higher Education and Disability (AHEAD)
AHEAD is a professional association committed to full participation of persons with disabilities in postsecondary education.
Online at: www.ahead.org

Center for Special Education Finance (CSEF)
CSEF addresses fiscal policy questions related to the delivery and support of special education throughout the United States and disseminates up-to-date information to stakeholders at all levels.
Online at: www.csef-air.org

Council for Children with Behavioral Disorders (CCBD)
A division of The Council for Exceptional Children, CCBD works to promote and facilitate the education and welfare of children and youth with behavioral and emotional disorders, and to promote professional growth and research as a means to better understand the problems of these children.
Information on teacher resources, including academic and behavioral interventions, is available from the CCBD website.
Online at: www.ccbd.net

Council for Exceptional Children (CEC)
CEC, a non-profit association, supports special education professionals and others working on behalf of individuals with exceptionalities, by advocating for appropriate governmental policies, setting professional standards, providing continuing professional development, advocating for newly and historically underserved individuals with exceptionalities, and helping professionals achieve the conditions and resources necessary for effective professional practice.
Online at: www.cec.sped.org

Division on Career Development and Transition (DCDT)
The DCDT promotes national and international efforts to improve the quality of and access to career/vocational and transition services, increases the participation of educators in career development and transition goals, and influences policies affecting career development and transition services for persons with disabilities.
Online at: www.dcdt.org

HEATH Resource Center
HEATH is the national clearinghouse of information on postsecondary education for individuals with disabilities.
Online at: www.heath.gwu.edu

The Job Accommodation Network (JAN)
Funded by the U.S. Department of Labor, JAN is a free consulting service that provides information about job accommodations, the Americans with Disabilities Act (ADA), and the employability of people with disabilities.
Online at: www.jan.wvu.edu

National Center on Educational Outcomes (NCEO)
NCEO provides national leadership in designing and building educational assessments and accountability systems that appropriately monitor educational results for all students, including students with disabilities and students with limited English proficiency.
Online at: www.cehd.umn.edu/nceo

National Center for Culturally Responsive Education Systems (NCCREST)
NCCREST provides technical assistance and professional development to close the achievement gap between students from culturally and linguistically diverse backgrounds and their peers, and reduce inappropriate referrals to special education.
Online at: www.nccrest.org
National Center on Secondary Education and Transition
NCSET coordinates national resources, offers technical assistance, and disseminates information related to secondary education and transition for youth with disabilities in order to create opportunities for those youth to achieve successful futures.
Online at: www.ncset.org

National Clearinghouse for Professions in Special Education
The clearinghouse provides information services and disseminates products related to attrition/retention, personnel preparation, financial aid, employment resources, career information, and state licensure information.
Online at: www.special-ed-careers.org

National Collaborative on Workforce and Disability for Youth
NCWD/Youth assists state and local workforce development systems to better serve youth with disabilities, and offers materials on promising practices, policies, and procedures in workforce development.
Online at: www.ncwd-youth.info

National Dissemination Center for Children with Disabilities
The Dissemination Center is a comprehensive information resource center that provides information for teachers and other professionals on: disabilities in children and youth; programs and services for infants, children, and youth with disabilities; IDEA, the nation’s special education law; No Child Left Behind, the nation’s general education law; and research-based information on effective practices for children with disabilities.
Online at: www.nichcy.org

National Dropout Prevention Center for People with Disabilities
This organization focuses on improving high school retention rates for youth with disabilities.
Online at: www.ndpc-sd.org

TeachNet
Teach Net seeks to improve student learning by helping teachers integrate web-based lessons into their instructional practice. This site lists lesson plans appropriate for grades 9 through 12.
Online at: www.teachersnetwork.org/teachnet

ThinkCollege.Net
This website for students, families, and professionals provides information and links to resources about selecting and applying for admission to postsecondary institutions for youth with intellectual disabilities.
Online at: www.thinkcollege.net

Legal Resources

The Individuals with Disabilities Education Act (IDEA)
Website
This U.S. Department of Education website provides access to comprehensive information about IDEA. The federal law governs how states and public agencies provide early intervention, special education, and related services to more than 6.5 million eligible infants, toddlers, children, and youth with disabilities. Infants and toddlers with disabilities (birth-2 years) and their families receive early intervention services under IDEA Part C. Children and youth (ages 3-21) receive special education and related services under IDEA Part B.
Online at: idea.ed.gov

Specific resources provided at idea.ed.gov include:
Regulations for IDEA: idea.ed.gov/download/finalregulations.html
Analysis of Alignment between IDEA and NCLB: idea.ed.gov/object/fileDownload/model/TopicalBrief/field/PdfFile/primary_key/3

Students with Disabilities Preparing for Postsecondary Education: Know Your Rights and Responsibilities
This informational pamphlet from the U.S. Department of Education’s Office for Civil Rights (OCR), explains the rights and responsibilities of students with disabilities who are preparing to attend postsecondary schools. The document also explains the obligations of a postsecondary school to provide academic adjustments, including auxiliary aids and services, to ensure the school does not discriminate on the basis of disability.
Online at: www.ed.gov/about/offices/list/ocr/transition.html

Wrightslaw
The mission of this organization is to provide parents, advocates, educators, and attorneys with accurate, up-to-date information about special education law and advocacy. This website provides articles, information about court cases, newsletters, and resources on dozens of topics in the Advocacy Libraries and Law Libraries. Among the resources offered are information and analysis relating to IDEA and a library of case law on special education litigation.
Online at: www.wrightslaw.com
Selected Reports/Studies

Academic Achievement and Educational Outcomes

The Academic Achievement and Functional Performance of Youth with Disabilities (2006)
This report by SRI International presents findings from the National Longitudinal Transition Study-2 (NLTS2). The study examines results of tests administered to a national sample of 16 to 18 year-old students with disabilities. The assessments covered language arts skills, mathematics abilities, and content knowledge in science and social studies. For youth for which a direct assessment was deemed inappropriate, a comprehensive measure of adaptive functioning in school, home, employment and community settings was administered. Online at: www.nlts2.org/reports/2006_07/nlts2_report_2006_07_complete.pdf

Improving Educational Outcomes for Students with Disabilities (2005)
This report from the National Council on Disability discusses policies that promote positive outcomes for students with disabilities as well as evidence-based research and practice. The latter includes the areas of dropout prevention and transition services. Online at: www.ncd.gov/newsroom/publications/2004/educationoutcomes.htm

Increasing School Completion: Learning from Research-Based Practices that Work (2004)
This brief by the National Center on Secondary Education and Transition provides a review of 45 prevention and intervention studies related to school completion. Findings indicate that there is no one-size-fits-all program for increasing school completion and that a variety of interventions can prove successful if they focus on engaging students in learning. Online at: www.ncd.gov/newsroom/publications/2004/edoutcomes.htm

Hanushek, E.A., Kain, J.F., & Rivkin, S.G. (2002). Review of Economics and Statistics, 84(4), 584-599. This article discusses program effectiveness for students receiving special education as well as any deleterious effects for those not so classified.

2005 State Special Education Outcomes: Steps Forward in a Decade of Change (2005)
Presenting the results of the tenth survey of state directors of special education by the National Center on Educational Outcomes, this report summarizes new initiatives, trends, accomplishments, and emerging issues, as states document the academic achievement of students with disabilities during an era of standards-based reform. Online at: cehd.umn.edu/NCEO/OnlinePubs/2005StateReport.htm

History, Policy, and Finance

History: Twenty-five years of progress in educating children with disabilities through IDEA (2000)
This pamphlet from the Office of Special Education and Rehabilitative Services traces the history of IDEA, the nation’s premier education legislation for students with disabilities. Online at: www.ed.gov/policy/speced/leg/idea/history.pdf

Learning Disabilities: Historical Perspectives (2001)
This paper from the National Research Center on Learning Disabilities traces the roots of learning disabilities back to the early 1800s, through the turbulent period of 1985, to the year 2000. Online at: www.nrcld.org/resources/ldsummit/hallahan.pdf

The Legislative and Litigation History of Special Education (1996)
Martin, E.W., Martin, R., & Terman, D.L. The Future of Children: Special Education for Students with Disabilities 6(1), 25-39. This article discusses historical developments related to the legal rights of students with disabilities, reviews relevant court cases, and explores the impact of major statutes involving special education. Online at: www.futureofchildren.org/usr_doc/vol6no1ART2.pdf

What We Know and Need to Know about the Consequences of High-Stakes Testing for Students with Disabilities (2004)
Ysseldyke, J. and Colleagues (2004). Exceptional Children, 71(1), 75-94. This article examines anecdotal and empirical evidence regarding increased participation of students with disabilities in state assessments.

This paper from the National Center on Educational Outcomes examines assessment accommodation policies in the 50 states. Online at: www.education.umn.edu/NCEO/OnlinePubs/2005StateReport.htm
disabilities. Their reports are based on analyses of extensive
data for the 1999-2000 school year.
Online at: www.csef-air.org/publications/seep/national/AdvRpt1.PDF

High School and Transitions to Adulthood

**Advances in Learning and Behavioral Disabilities (2004)**
This issue of *Research in Secondary Schools* (Vol. 17) examines the education of high school students with disabilities. Among the topics addressed are: efficacy of self-management techniques; the utility and efficacy of homework assignments; treatments for secondary students with autism; interventions on content-area learning; the effects of teacher licensure on teaching competence; dynamic assessment of working memory; and uses of technology in secondary education programs for students with learning and behavioral disabilities.

**After High School: A First Look at the Postsecondary Experiences of Youth with Disabilities: A Report from the National Longitudinal Transition Study-2 (NLTS2) (2005)**
This report from SRI International presents research from the NLTS2, focusing on the high school experiences of students with disabilities and their post-school transition. Topics include postsecondary education, employment, and social life following high school.

**An Overview of Findings From Wave 2 of the National Longitudinal Transition Study-2 (2006)**
This report from SRI International provides an executive summary of two previous reports of findings from the NLTS2. Topics include postsecondary education, employment, and social life following high school.

**Changes Over Time in Early Postschool Outcomes of Youth with Disabilities (2005)**
This SRI International report analyzes changes in the experiences of disabled youth using data from the National Longitudinal Transition Study and the National Longitudinal Transition Study-2. Focusing on youth who had been out of school for up to two years, this report addresses secondary school completion, subsequent living arrangements and social involvement, enrollment in further education, entering the job market, and community engagement.

**Transition Planning for Students with Disabilities (2004)**
This report from SRI International presents results from NLTS2 and examines the transition planning process undertaken during high school to prepare youth with disabilities for life after school and adulthood.

**How Are We Preparing Students With Emotional Disturbances for the Transition to Young Adulthood? Findings From the National Longitudinal Transition Study-2 (2006)**
Wagner, M. & Davis, M.A. *Journal of Emotional & Behavioral Disorders* 14(2), 86-98. This article describes five principles of exemplary practices to promote positive secondary school experiences and successful trajectories into early adulthood for students with emotional disturbances.

**Other Topics**

Kavale, K.A., & Forness, S.R. *Remedial and Special Education*, 21 (5), 279-296. This article examines the integration of students with disabilities into general education classrooms.

**Minority Students in Special and Gifted Education (2002)**
This report from the National Research Council (Donovan & Cross, Eds.) reviews the knowledge base on minority representation in special and gifted education and examines the higher representation of minority students in disability categories such as mental retardation and emotional disturbance. Findings and recommendations address the factors that may contribute to disproportionate representation.
Online at: www.nap.edu/books/0309074398/html/

**A Brief History of Special Education Technology (2000)**
Blackhurst, A.E., & Edyburn, D.L. (2000). *Special Education Technology Practice*, 2(1), 21-36. This article provides an overview of trends in special education related to instructional technology, assistive technology, medical technology, productivity tools, information technology, and the technology of teaching.
Online at: www.setp.net/pdf/SEThistory.pdf
Special Education Journals

Journal of Special Education
This multidisciplinary publication presents primary research and scholarly reviews related to special education. Quarterly. Peer reviewed.
Online at: www.proedinc.com/jse.html

Preventing School Failure
This journal provides educators and administrators with articles focused on subjects related to preventing failure in schools. Quarterly. Peer reviewed.
Online at: www.heldref.org

Learning Disabilities Research & Practice
The official publication of the Division of Learning Disabilities of the Council for Exceptional Children, this journal features information on practices related to identification, assessment, placement, teacher training, and service delivery systems. Quarterly. Peer reviewed.
Online at: www.blackwellpublishing.com/LDRP

Journal of Emotional and Behavioral Disorders
This journal includes articles, reviews, and commentary on research and practice for professionals that serve individuals with emotional and behavioral disorders. Quarterly. Peer reviewed.
Online at: www.ingentaconnect.com/content/proedcw/jebd

Remedial & Special Education
This journal features topical and non-topical issues involving the education of persons for whom typical instruction is not effective. Also included are interpretation of research literature and recommendations for the practice of remedial and special education. Six times a year. Peer reviewed.
Online at: www.ingentaconnect.com/content/proedcw/jebd

Rural Special Education Quarterly
Focuses on federal and national events relevant to rural individuals with disabilities, progressive service delivery systems, reviews of relevant conferences and publications, and resources for rural special educators. Quarterly. Peer reviewed.
Online at: www.acres-spied.org/publications

Learning Disabilities—A Contemporary Journal
Forum for research, practice and opinion papers in the area of learning disabilities and related disorders. Journal targets researchers and practitioners in education, special education, psychology, and related fields. Twice a year. Peer reviewed.
Online at: www.ldam.org

Reading & Writing Quarterly
An interdisciplinary journal, published in Great Britain, which addresses the causes, diagnosis, prevention, evaluation, and remediation of reading and writing difficulties in regular and special education settings. Quarterly. Peer reviewed.
Online at: www.tandf.co.uk/journals/ft/10573569

Data Resources

IDEadata Website
This website provides public access to the most recent data about children with disabilities served under the Individuals with Disabilities Education Act (IDEA). Those data are collected annually by the U.S. Department of Education, Office of Special Education Programs, in accordance with provisions of IDEA. Information is provided in the form of tables produced for the Annual Reports to Congress.
Online at: www.ideadata.org

National Longitudinal Transition Study-2 (NLTS2)
National Center on Special Education Research (Institute of Education Sciences)
Funded by the U.S. Department of Education, this study offers data documenting the experiences of a national sample of students who were 13 to 16 years of age in 2000 as they move from secondary school into adult roles. NLTS2 examines a wide range of topics, including high school coursework, extracurricular activities, academic performance, postsecondary education and training, employment, independent living, and community participation. It produces information of interest to many audiences, including state and local education agencies, the U.S. Congress, the U.S. Department of Education, parents, teachers, researchers, advocates, and policymakers.
Online at: www.nlts2.org

Special Education Expenditure Project (SEEP)
The 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA) mandated data collections and studies to measure and evaluate the impact of the IDEA and the effectiveness of state efforts to provide a free, appropriate public education to all children with disabilities. In response to this requirement, the U.S. Department of Education has funded the American Institutes for Research to support the Special Education Expenditure Project. SEEP is the main focus of the Center for Special Education Finance (CSEF).
Online at: www.csef-air.org

Study of State and Local Implementation of the Individuals with Disabilities Education Act (SLIDEA)
Conducted by Abt Associates and its partners for the U.S. Department of Education’s Office of Special Education Programs, SLIDEA examines how the Amendments of the Individuals with Disabilities Education Act (IDEA) of 1997 are being implemented. The study has a particular focus on student performance, access to the curriculum, behavioral supports, parental involvement, and transitions for young children to school and youth to adult life.
Online at: www.abt.sliidea.org
Selected Experts

Robert A. Algozine
Professor, Department of Educational Administration, Research, and Technology, University of North Carolina at Charlotte
Researcher, former co-editor of the journal Exceptional Children. Served on the task force responsible for the special education programs being implemented in the Charlotte-Mecklenburg School system
Contact: r algoz@email.uncc.edu

Alfredo J. Artiles
Professor, College of Education, Arizona State University
Researcher with expertise in the area of English-Language Learners and special education. His work examines the role of culture in learning in two contexts: special education placement practices and teacher learning in urban multicultural schools. Co-Principal Investigator of the National Center for Culturally Responsive Education Systems (NCCREST)
Contact: alfredo.artiles@asu.edu

José Blackorby
Program Manager, Special Education and Disability Policy, SRI International
Researcher with experience in conducting large-scale national studies of students with disabilities. Principal investigator of the National Study of Alternative Assessments (NSAA), researcher on the Special Education Elementary Longitudinal Study (SEELS) and National Longitudinal Transition Study-2 (NLTTS2)
Contact: dispolicy@sri.com

Martha J. Coutinho
Professor, Department of Human Development and Learning, East Tennessee State University
Researcher who has written on racial and gender-based disproportionate representation of minority students in special education.
Contact: coutinho@etsu.edu

Donald D. Deshler
Professor, School of Education, University of Kansas
Researcher and director of the Center for Research on Learning (CRL) at the University of Kansas. The CRL focuses on the validation of academic and social strategies for adolescents who struggle with becoming good readers, writers, and learners.
Contact: d deshler@ku.edu

Douglas Fuchs
Professor, Peabody College of Education and Human Development, Vanderbilt University
Researcher whose areas of expertise include instruction of students at risk for school failure because of disability or poverty. Through a number of projects, his work has focused on the development of pre-referral interventions, peer-assisted learning strategies in reading and math, curriculum-based measurement procedures, and methods of reintegrating students with high-incidence disabilities into mainstream settings.
Contact: doug.fuchs@vanderbilt.edu

Lynn Fuchs
Professor, Peabody College of Education and Human Development, Vanderbilt University
Researcher specializing in the instruction and assessment of students with disabilities. She has conducted programmatic research on assessment methods for enhancing instructional planning and on instructional methods for improving reading and math outcomes for students with learning disabilities.
Contact: lynn.fuchs@vanderbilt.edu

Thomas Hehir
Professor, Graduate School of Education, Harvard University
Researcher and director of the School Leadership Program, he served as director of the U.S. Department of Education’s Office of Special Education Programs from 1993 to 1999. In that capacity, he was responsible for federal leadership in implementing the Individuals with Disabilities Education Act (IDEA).
Contact: thomas.hehir@gse.harvard.edu

David R. Johnson
Professor, College of Education and Human Development, University of Minnesota
Director of the Institute on Community Integration (ICI), a federally-designated University Affiliated Program that focuses on developmental disabilities. ICI carries out three core activities—preservice and continuing education, research and dissemination, and service and outreach across four program areas (early childhood services, school-age services, transition and employment services, and adult services/community living).
Contact: johns006@umn.edu

Janette K. Klingner
Professor, School of Education, University of Colorado
Researcher whose work focuses on the disproportionate representation of culturally and linguistically diverse students in special education, reading comprehension strategy instruction for culturally and linguistically diverse students, and enhancing the sustainability of culturally responsive and evidence-based practices through professional development.
Contact: janette.klingner@colorado.edu

Margaret J. McLaughlin
Professor, College of Education, University of Maryland
Associate Director of the Institute for the Study of Exceptional Children and Youth and researcher who focuses on special education policy and the impacts of educational reform on students with disabilities.
Contact: mj m@umd.edu
Thomas B. Parrish  
*Managing Research Scientist, Deputy Director, Education and Human Development Program, American Institutes for Research*

Director of the Center for Special Education Finance (CSEF) at AIR, specializes in public education fiscal policy with a focus on special education. CSEF is involved in research addressing the national agenda for special education finance and in conducting state and federal studies on the impact of special education finance reform.  
Contact: tparrish@air.org

Martha Thurlow  
*Director, National Center on Educational Outcomes (NCEO), University of Minnesota*

Researcher whose areas of expertise include assessment and decision-making, learning disabilities, dropout prevention, effective classroom instruction, and integration of students with disabilities in general education settings. NCEO was established in 1990 to provide national leadership in designing and building educational assessments and accountability systems that appropriately monitor educational results for all students, including students with disabilities.  
Contact: nceo@umn.edu

Mary Wagner  
*Director, Center for Education and Human Services, SRI International*

Researcher specializing in large-scale longitudinal studies of students with disabilities. Currently the principal investigator of the National Longitudinal Transition Study-2 (NLTS2), which is investigating the secondary school programs, experiences, and achievements of a nationally representative sample of students with disabilities. Also served as co-director of the Special Education Elementary Longitudinal Study (SEELS).  
Contact: cehs@sri.com