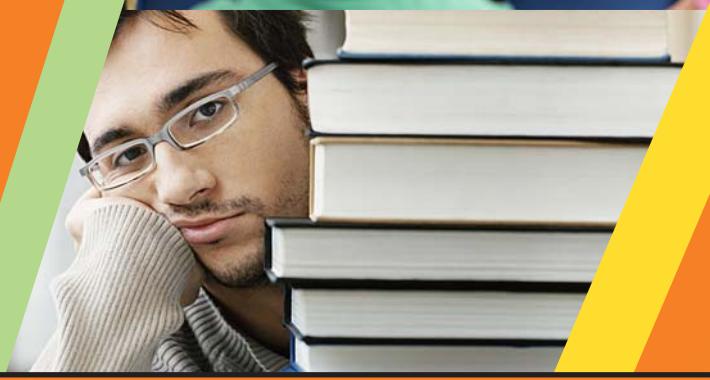

2009 The State of Learning Disabilities

National Center for Learning Disabilities®
The power to hope, to learn, and to succeed.

Our Mission

The National Center for Learning Disabilities works to ensure that the nation's 15 million children, adolescents and adults with learning disabilities have every opportunity to succeed in school, work and life. NCLD provides essential information to parents, professionals and individuals with learning disabilities, promotes research and programs to foster effective learning and advocates for policies to protect and strengthen educational rights and opportunities.

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The State of Learning Disabilities 2009

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Foreword

by Donald D. Deshler
Chairperson, NCLD Professional Advisory Board

As Chairperson of the National Center for Learning Disabilities (NCLD) Professional Advisory Board, I am pleased to introduce this groundbreaking report. Never before has a learning disabilities (LD) organization provided a comprehensive report on the status of individuals with LD and and provided a data-based perspective of LD in the context of education reform. We offer it to policy makers, education professionals, media, parents and others to ensure that there is access to key LD data and expand awareness about what LD is and who the condition impacts. We hope the report will serve as the foundation for any education and disability policy decisions impacting over 15 million lives.

To better understand the significance of the data in this report, it would be helpful to put it into a historical perspective. In 1975, the United States Congress passed the Education for All Handicapped Children Act (PL 94-142). Now known as the Individuals with Disabilities Education Act of 2004 (IDEA), that law has evolved from a law focused on providing access for students with disabilities to the school building, to a law that also ensures a free, appropriate public education in the least restrictive environment.

Although the doors to public school have been open to students with learning disabilities for nearly forty years, the IDEA contains no provisions setting high expectations and holding schools accountable for their progress. Since 1997, the IDEA has required that all students with disabilities have access to the general curriculum and are included in assessments. However, academic progress has been so slow that in its latest reauthorization of IDEA, Congress reminded us that "the implementation of the Act has been impeded by low expectations, and an insufficient focus on applying replicable research on proven methods of teaching and learning." In 2001, Congress aligned the IDEA with the Elementary and Secondary Education Act (ESEA)—currently known as No Child Left Behind. With this policy endeavor, there has been both controversy and progress for students with disabilities as there is now a direct link between access to the general curriculum and academic progress through accountability.

For over 30 years, NCLD has worked to ensure that the nation's 15 million children, adolescents and adults with learning disabilities have every opportunity to succeed in school, work and life. It is our hope that this report will be seen as another valuable contribution by NCLD to the professionals who serve individuals with learning disabilities and their families.

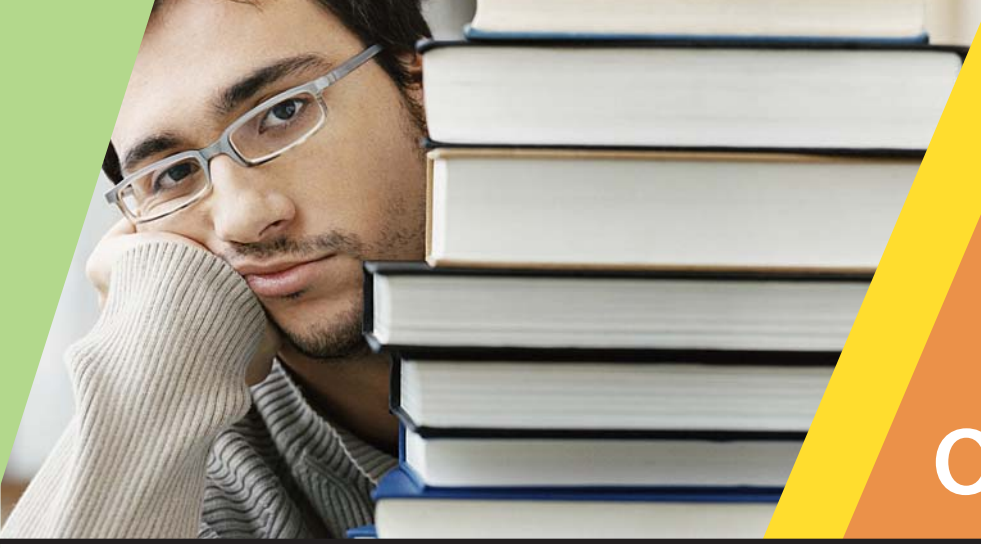
Sincerely,

Donald D. Deshler, Ph.D. is the Williamson Family Distinguished Professor of Special Education and director of the Center for Research on Learning (CRL) at the University of Kansas. A former junior high school teacher, Deshler's first-hand experience with at-risk students inspired him to pursue better methods for teaching and helping these students succeed in school and beyond.

Contents

Key Facts

- 2.7 million public school students—or about 5 ½ % of all students in public schools—were identified as having learning disabilities in 2007 and were eligible to receive educational assistance under the federal Individuals with Disabilities Education Act (IDEA).
- The number of school-age children with learning disabilities who receive these Federally-authorized special education services escalated rapidly during the late 1980s and 1990s. However, during the last decade (1998-2007) the number of children identified as LD in public schools has declined by 7%.
- Males comprise almost two-thirds of school-age students with LD who receive special education services.
- The cost of educating a student with LD is 1.6 times the expenditure for a general education student. This is dramatically less than the average cost for all students with disabilities, which runs 1.9 times the cost for a general education student.
- In 2007, 59% of students with LD spent 80% or more of their in-school time in general education classrooms. In 2000, that figure was just 40%.
- Students with LD are retained in grade much more often than those without disabilities. In addition, they are involved in school disciplinary actions at a much higher rate than their non-disabled peers.
- Only a small percentage—estimated at between 25% and 35%—of students with LD are being provided with assistive technology to support their instruction and learning.
- The high school dropout rate among students with LD was 25% in 2007, down from 41% in 1997.
- More students with LD are graduating with a regular high school diploma—61% in 2007—up from 51% a decade earlier.
- Students with LD go on to postsecondary education at a much lower rate than their non-disabled peers, and of those who do, few seek supports in college and few earn undergraduate or advanced degrees.
- In 2005, 55% of adults with LD (ages 18-64) were employed compared to 76% of those without LD, 6% were unemployed vs. 3%, and 39% were not in the labor force vs. 21%.



Overview

It's necessary to define what a learning disability (LD) is in order to understand how Americans with learning disabilities are functioning today in schools, colleges and workplaces.

The most commonly used definition, from the federal special education law, the Individuals with Disabilities Education Act (IDEA), uses the term **specific learning disability (SLD)**. According to the IDEA, SLD is *"a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. Such term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Such term does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage."*

The National Joint Committee on Learning Disabilities (NJCLD), a national committee of representatives of organizations committed to the education and welfare of individuals with learning disabilities (see box), offers another definition of learning disabilities (LD). According to NJCLD *"Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical skills. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not, by themselves, constitute a learning disability. Although learning disabilities may occur concomitantly with other disabilities (e.g., sensory impairment, mental retardation, serious emotional disturbance), or with extrinsic influences (such as cultural differences, insufficient or inappropriate instruction), they are not the result of those conditions or influences."* (NJCLD, 1990).

Members of the National Joint Committee on Learning Disabilities (NJCLD)

American Speech-Language-Hearing Association (ASHA)

Association on Higher Education and Disability (AHEAD)

Association of Educational Therapists (AET)

Council for Learning Disabilities (CLD)

Division for Communicative Disabilities and Deafness (DCDD), Council for Exceptional Children (CEC);

Division for Learning Disabilities (DLD), Council for Exceptional Children (CEC)

International Dyslexia Association (IDA)

International Reading Association (IRA)

Learning Disabilities Association of America (LDA)

National Association for the Education of African American Children with Learning Disabilities (NAEAACLD)

National Association of School Psychologists (NASP)

National Center for Learning Disabilities (NCLD)

Recording for the Blind & Dyslexic (RFB&D)

Legal Protections for People with LD

Four federal laws—two that are education-specific and two that are intended to prevent discrimination—establish and undergird the rights of children and adults with LD to receive special education services as well as fair treatment in public schools, postsecondary education and the workplace.

- Children and youth with disabilities, who are 3-21 years old, receive special education services through the **Individuals with Disabilities Education Act (IDEA)**. This law guarantees each child a free, appropriate public education tailored to his or her individual needs, as well as the right of the children and their parents or guardians to timely evaluation, access to all meetings and paperwork, transition planning and related services. IDEA specifies that children with any of 13 possible disabling conditions, including LD, are eligible for these services.

- **Elementary and Secondary Education Act (ESEA)** (the current version is known as the No Child Left Behind Act or NCLB) is the nation's main federal education law. First passed in 1965 as part of President Johnson's war on poverty, it now affects all public school students from kindergarten through grade 12. ESEA's major strength is that it compels schools to meet rigorous standards for educational content and student achievement (i.e., *what* and *how well* students should be learning). It also requires schools to measure yearly student progress to see if it is adequate. Under ESEA, schools must provide data on overall student progress as well as progress made by groups such as students with disabilities.

- Discrimination against people with disabilities in federally funded programs and activities is prohibited under **Section 504 of the Rehabilitation Act of 1973 (Section 504)**. While this civil rights law doesn't fund programs, it does permit the withdrawal of funds from programs that fail to comply with the law. Persons with a physical or mental impairment that substantially restricts one or more major life activities are eligible for services under Section 504. Some schools use Section 504 to support LD students needing only simple accommodations or modifications. Children and youth with AD/HD who don't need more comprehensive special education support also are frequently served under this law. All students eligible for special education services under the IDEA are also eligible under Section 504, while the reverse is not true.

- **The Americans With Disabilities Act (ADA)** is another civil rights measure that protects people with disabilities from discrimination in schools, the workplace and other environments. Like Section 504, the ADA is not a funding mechanism and it protects people who have a physical or mental impairment that heavily restricts one or more major life activities. Since learning is considered such an activity under the ADA, students served under IDEA also are covered by this law.

  In addition, people with disabilities are protected from discrimination in employment by the ADA. While the ADA doesn't require employers to hire unqualified applicants with disabilities, it does prohibit employers from using unnecessary qualification standards to weed out applicants with disabilities; relying on inaccurate job descriptions to determine that an employee with a disability can no longer perform her job; and failing to provide reasonable accommodations which do not cause undue hardship on the employer.

  Recent Update to the ADA: Since its passage in 1990, courts had interpreted the definition of disability under the ADA so narrowly that hardly anyone could meet it. To correct this, Congress passed the Americans with Disabilities Act (ADA) Amendments Act of 2008, which became effective on January 1, 2009. The ADA Amendments Act achieved the following:

  - lowered the threshold for what constitutes "substantially limits a major life activity."
  - clarified that the beneficial effects of "mitigating measures" should not be considered when determining the degree to which a disability impacts a major life activity.
  - expanded the list of "major life activities" to include reading, thinking, concentrating.

  As a result, more people are now able to satisfy the definition of disability, gain access to reasonable accommodations and be protected from discrimination, including those with learning disabilities.

What We Know About LD

Learning disabilities arise from neurological differences in brain structure and function and affect the brain's ability to store, process or communicate information. While it is unclear what creates the neurological disorders that lead to learning disabilities, heredity is considered a major factor because learning disabilities seem to occur within members of the same families; someone with LD may have parents or other relatives with similar difficulties. Other possible causes include pre-natal and birth problems—a list that covers illness or injury, drug and alcohol use during pregnancy, low birth weight, oxygen deprivation and premature or prolonged labor—as well as childhood experiences of traumatic injuries, severe nutritional deprivation, and exposure to poisonous substances such as lead.

Learning disabilities are not caused by visual, hearing or motor disabilities, low intelligence, mental retardation, emotional disturbance, or cultural, environmental or economic disadvantages. However, there is a higher incidence of learning disabilities among people living in poverty—apparently because poor people are more likely to be exposed to poor nutrition, ingested and environmental toxins (e.g., lead, tobacco and alcohol) and other risk factors during early and critical stages of development.

Learning disabilities are both real and permanent, and there is a growing body of data to support neurobiological causes including new evidence documenting that families are genetically linked to LD. Some people never learn that learning disabilities are responsible for their lifelong problems with reading, writing or comprehension. Others aren't identified as having LD until they are adults. Many suffer from low self-esteem, fall into juvenile delinquency or fail academically because their LD is not discovered and appropriate help provided until it's too late to prevent these and other psychological problems from happening.

Because learning disabilities are usually spotted in children after they have started school, the public perception is that LD mostly affects children and adolescents. It is true that LD is common enough to affect an estimated 4%-6% of public school students. (The percentage is much higher when individuals who struggle with reading for other reasons are considered.) Yet learning disabilities last a lifetime and vary in the impact they have on those affected.

That said, individuals with LD are not powerless against their disabilities. Over time, they can learn to compensate for their weaknesses, and if they receive effective support early enough, most people with LD can develop good academic and related skills and enjoy great success academically and professionally. Today's plethora of technology tools has been particularly helpful to both children and adults with LD. Such technological supports as screen readers, audio books, and speech-to-text software enable people with LD to bypass their deficits and enjoy the same level of access to information as those without LD.

Scientific inquiry is creating more reason for hope, too. Top researchers and experts in the education, psychology, speech-language and medical communities are using methods like new imaging techniques such as fMRIs to explore the brain for the origins of these disorders and how brain activity maps onto such behaviors as learning to read, counting, paying attention and organization and memory. The result is a deeper understanding of different types of learning disabilities, and an expanding menu of effective tools and strategies to support people with LD.

Common Types of Learning Disabilities

The most prevalent LD is *dyslexia,* where people have trouble understanding written language. Researchers have learned the neurological basis of dyslexia—also known as *reading disability* or *reading disorder*—by using separate techniques to measure blood flow and electrical activity in the brain. They discovered that people with dyslexia do not decipher printed words in the same way that non-dyslexic readers do.

> **Dyslexia** is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and / or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge.
>
> *Formal definition of dyslexia developed by the International Dyslexia Association. Also used by the National Institute of Child Health and Human Development (NICHD).*

Other common learning disabilities include the following:

- **Dyscalculia** – where a person has trouble solving arithmetic problems and grasping math concepts.
- **Dysgraphia** – where a person struggles to form letters or write within a defined space.
- **Auditory and Visual Processing Disorders** – where a person with normal hearing and vision nevertheless has difficulty understanding and using verbal or written language.
- **Non-verbal Learning Disabilities** – specific disorders which originate in the right hemisphere of the brain and cause problems with visual-spatial, intuitive, organizational, evaluative and holistic processing functions.

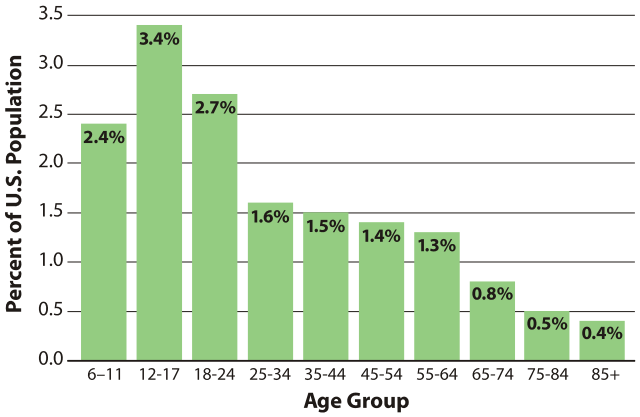
Attention deficit hyperactivity disorder (AD/HD) is sometimes mistakenly thought to be a learning disability. While this isn't the case, AD/HD does occur in about one third of people with LD. AD/HD results in difficulty concentrating, staying focused or paying attention to specific tasks. Research has demonstrated that AD/HD has a very strong neurobiological basis. The co-occurrence of AD/HD and LD reflects the effect of shared genetics and environmental factors that contribute to the development of both disorders.

LD in the U.S.

Overall, reliable information on the numbers of Americans who have learning disabilities is scarce. While states are required to report on the number of public school students receiving special education due to LD, surveys based on parent or self-reporting are the only source of information about the prevalence of LD across all ages. The most recent data comes from the 2005 U.S. Survey of Income and Program Participation (SIPP), a sample of the U.S. civilian non-institutionalized population. The SIPP is sponsored by the U.S. Census Bureau to collect source and amount of income, labor force information, program participation and eligibility data, and general demographic characteristics to measure the effectiveness of existing federal, state, and local programs. It is also used to estimate future costs and coverage for government programs, such as food stamps, and to provide improved statistics on the distribution of income and measures of economic well-being in the country. SIPP's survey design is a continuous series of national panels, with a sample size of 36,000 interviewed households. The SIPP periodically asks all adults surveyed the question, *"Do you have a learning disability such as dyslexia?"*

The SIPP shows the LD prevalence rate among the U.S. population (ages 6 and older) to be 1.8%, totaling 4.67 million Americans. This represents roughly one percent of all those reporting some level of disability—18.7 % of the population. The SIPP found a parent-reported LD rate of 3% among school-age children (2.4% ages 6-11 and 3.4% ages 12-17). This is slightly less than the rate reported by schools, which is just under 4% of the resident school-age population and over 5% of public school enrollment. Rates of LD among adults range from 2.7% of the population ages 18-24 to as low as .4% for those over age 85.

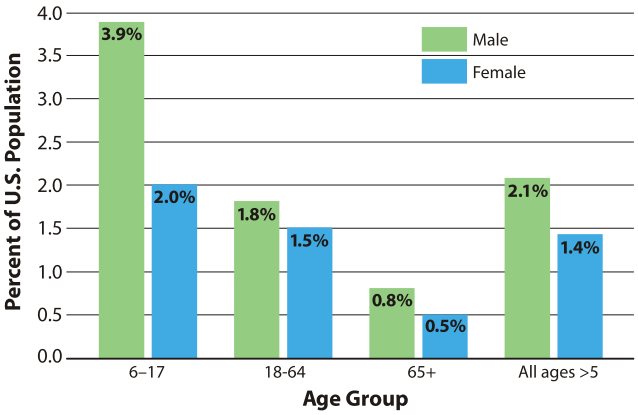
Prevalence of learning disability by age group



Source: H. Stephen Kaye, Unpublished tabulations of 2005 data from the U.S. Survey of Income and Program Participation

Males are much more likely to have acknowledged learning disabilities than females. The ratio is particularly high among school-age children—with almost twice as many boys than girls reported by family members as having LD (3.9 % vs. 2.0 %). Among adults, the ratio is smaller—1.8 % male vs. 1.5% female among those ages 18-64 and .8% male vs. .5% female among those 65 and older.

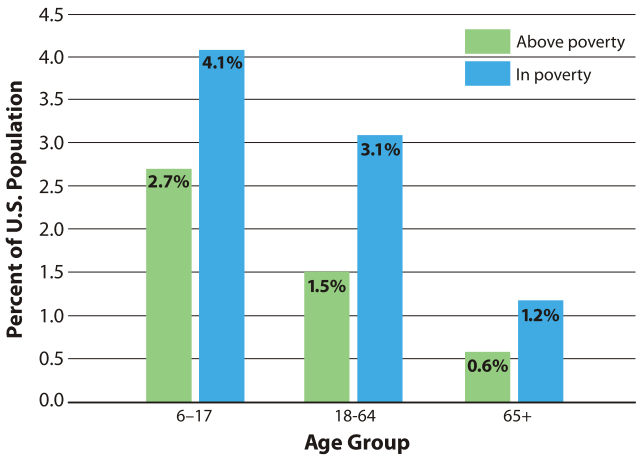
Prevalence of learning disability by age group and sex



Source: H. Stephen Kaye, Unpublished tabulations of 2005 data from the U.S. Survey of Income and Program Participation

People living in poverty are more likely to report having learning disabilities than the rest of the population. Families below the poverty line reported that 4.1% of their children (ages 6-17) have learning disabilities. For families that were not poor, that figure was 2.7%. The same is true for adults in poverty, who self-reported their learning disabilities at twice the rate of adults who didn't live in poverty (3.1% vs. 1.5% for adults ages 18-64 and 1.2% vs. .6% for those age 65 or older).

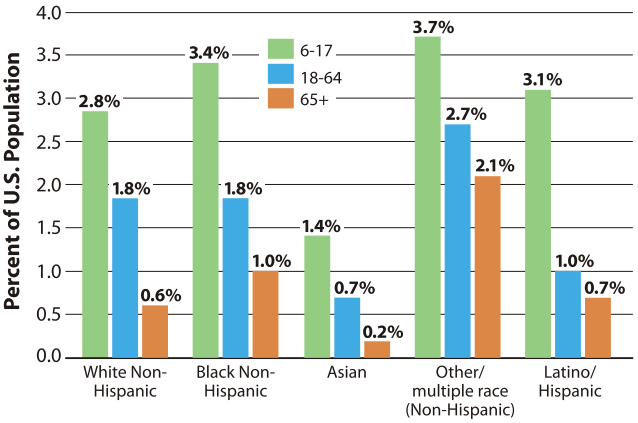
Prevalence of learning disability by age group and poverty status



Source: H. Stephen Kaye, Unpublished tabulations of 2005 data from the U.S. Survey of Income and Program Participation

Learning disabilities affect whites, Blacks, and Latinos about equally across all ages. The rate of reported LD is significantly higher among other/multi race populations (such as Native Americans) and substantially lower among Asians.

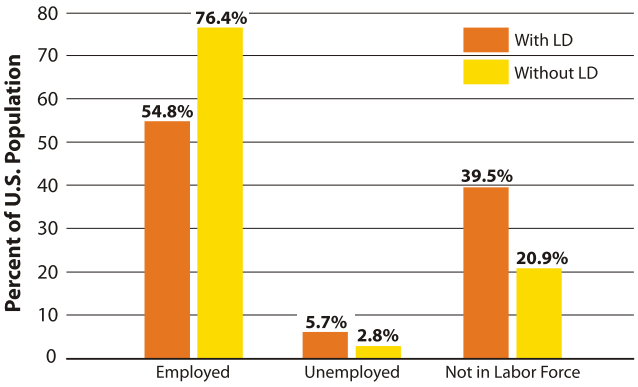
Prevalence of acknowledged LD by age group and race/ethnicity



Source: H. Stephen Kaye, Unpublished tabulations of 2005 data from the U.S. Survey of Income and Program Participation

Adults with LD face challenges with employment, most likely due to a lack of educational attainment. The unemployment rate for those with LD was twice (5.7%) that of those without LD as well as for those reporting not to be in the labor force (39.5% with LD vs. 20.9% without LD). Just over half of adults with LD reported being employed (54.8%) while the rate for those without LD was 76.4%.

Labor force status of working-age adults (18-64)



Source: H. Stephen Kaye, Unpublished tabulations of 2005 data from the U.S. Survey of Income and Program Participation

Since many incidences of learning disabilities are never diagnosed or admitted, surveys based on self-reporting, such as SIPP, may sharply under-estimate how widespread learning disabilities really are in the U.S.

While the SIPP data cited here indicates a prevalence rate of just under 2% among Americans 5 years and older, the true prevalence of learning disabilities in the U.S. may be as high as 10-15%—in both children and adults—based on research by leading experts. The data also suggest that the differences in LD incidence among boys and girls are exaggerated. Males of all ages and their families report that they have learning disabilities twice as often as females and their families. However, based on anecdotal data from clinical settings, it is likely that learning disabilities are present in roughly equal numbers of males and females and that the higher rate among males is due to males and their families being more willing to obtain, and reveal, the presence of learning disabilities. The school-age population, as reported by states, shows even more disparity between boys and girls.

LD in the Schools

Much more is known about learning disabilities among the school-age population. Information comes from both data submitted annually to the U.S. Department of Education as well as large-scale longitudinal studies that have provided significant information about students with LD.

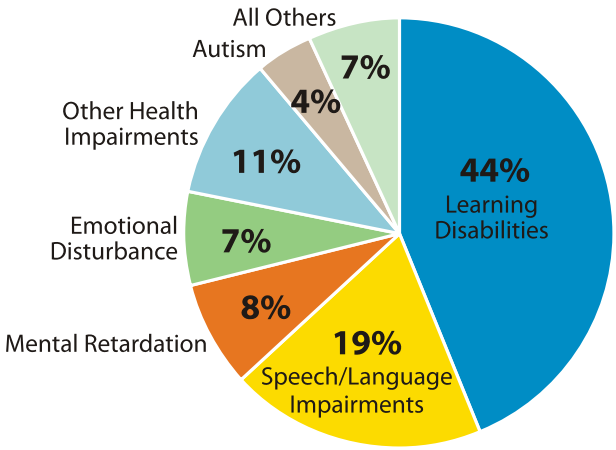
Prevalence

In 2007, there were 2.7 million American public school students (approximately 5 ½% of the total public school enrollment) identified with learning disabilities so that they could be served under the Individuals with Disabilities Education Act (IDEA). These students represented 44% of the more-than-6 million school-age children with all kinds of disabilities who receive special education services.

Much has been written about the increase in the number of children identified as having LD in the years following enactment of the nation's special education law in 1975 –then known as the Education for All Handicapped Children Act (EHA). In fact, the LD category grew more than 300% between 1976 and 2000. The group also represented over 50% of all students eligible for special education during most of that time period.

This dramatic rise in numbers drew criticism from researchers and policymakers alike. In a landmark paper published in 2001, *Rethinking Learning Disabilities,* researchers suggested that the category was a "catch-all" for low-achieving students and that, from its inception as a category, LD has served as a "sociological sponge that attempts to wipe up general education's spills and cleanse its ills." A report from a Presidential commission on special education in 2002 reported that up to 40% of children

Special education students by disability category, 2007



Source: www.IDEAdata.org, 2007 Child Count

School-age students eligible for special education services are reported only by their primary disability. However, many students have multiple disabling conditions and may receive a variety of services to address conditions that interfere with their educational progress. A 2001 study found that schools reported 30% of students with a primary disability of LD also had a secondary disability while 7% had two or three additional disabilities, such as Speech/Language Impairments or Emotional Disturbance.

(Source: SEELS Wave 1 School Program Survey, 2001)

identified for special education were there because they weren't taught to read rather than because they had a true disability.

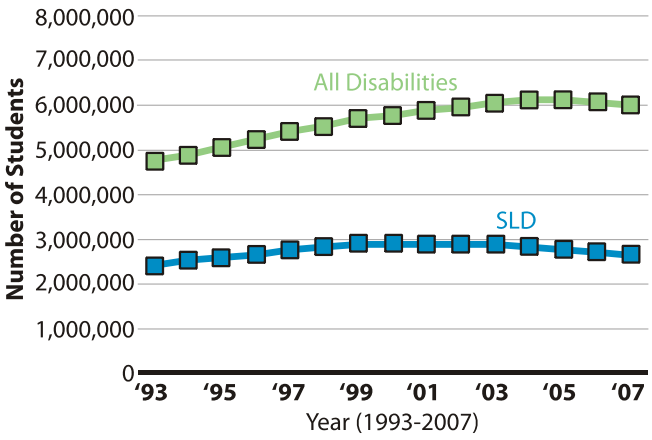
A 2002 report released by a prominent think tank, the Manhattan Institute, characterized the special education funding procedures in 33 states and the District of Columbia as "bounty" funding systems—systems that create perverse financial incentives to label children as disabled and in need of special education in order to receive additional federal funds. The report explains the incentive to label students as needing special education as follows:

> *"Some services that a school would have provided to a particular child no matter what can be redefined as special education services if the child is placed in special education; these services are not truly special education costs because they would have been provided anyway. For example, if a school provides extra reading help to students who are falling behind in reading, the school must bear that cost itself. But if the same school redefines those students as learning disabled rather than slow readers, state and federal government will help pick up the tab for those services. This is financially advantageous for the school because it brings in new state and federal funding to cover "costs" that the school would have had to pay for anyway."*
>
> (Effects of Funding Incentives on Special Education Enrollment, 2002)

These criticisms, coupled with research into reading acquisition, served as the basis for substantial changes to the manner in which LD is to be identified in school-age children when the IDEA was reauthorization by Congress in 2004.

The year 2000 marked a turning point in the rise of students identified as LD in public schools. While the numbers of students eligible for special education has continued to grow—increasing by 16% over the past 7 years, the number of students with LD has declined each year since 2000, falling by 9% between 2000 and 2007. As a result, the category that accounted for more than half of all special education students for decades now accounts for slightly less than 44%. While still the largest category of students receiving special education, the trend shows a steady decline in the number of students being identified as LD each year.

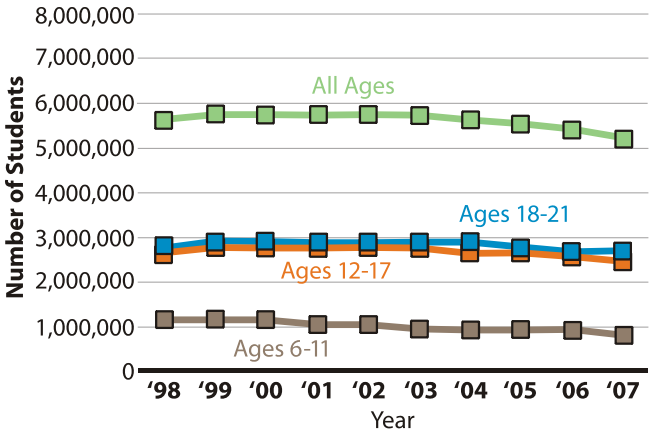
Number of students served in special education, 1993-2007 Ages 6-21



Source: www.IDEAdata.org, 2007 Child Count

This slowdown has been most pronounced among 6-11-year-olds: between 1997 and 2007, this age group's share of the total student population with an LD classification declined from 40% to 32%, indicating a significant decline in the number of elementary age children identified as having learning disabilities.

LD students by age group



Source: www.IDEAdata.org, 2007 Child Count

Why are fewer students being classified as having LD in the elementary grades? Several possible reasons for this change include:

- Expansion and attention to early childhood education including universal preschool and the use of early screenings and diagnostic evaluations to support school readiness;
- Improvements in reading instruction provided in general education, making reading difficulties—a characteristics of most students classified as LD —less prevalent in our nation's elementary schools;
- Shift in identification approaches, including the use of Response-to-Intervention (RTI) (see box), that might result in greater numbers of struggling students receiving early assistance in general education and reducing the need for special education classification;
- Changes in the definitions of various special education disability categories. In 1999, Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (AD/HD) were added to the list of conditions under the Other Health Impairments (OHI) category in IDEA regulations. Since this change, the number of students identified as eligible for special education services under the OHI category has increased 150%. The OHI category now represents 10% of all students receiving special education. While students with ADD or AD/HD do not represent the entire population of the OHI category, much of this increase is attributable to the regulatory change in 1999. Prior to 1999, many of these students would most likely have been assigned to the LD category.

Despite this slowdown in the numbers of students identified as LD, once identified and found eligible for special education services, few students lose that distinction (i.e., are declassified) during their school career. The percentage of students with LD (ages 14-21) who leave special education has remained constant for a decade, with just 1.4% of students with LD being declassified annually.

What is Response-to-Intervention (RTI)?

Response-to-Intervention (RTI) is a multi-tier approach to the early identification and support of students with learning and behavior needs. The RTI process begins with high-quality instruction and universal screening of all children in the general education classroom. Struggling learners are provided with interventions at increasing levels of intensity to accelerate their rate of learning. These services may be provided by a variety of personnel, including general education teachers, special educators, and specialists. Progress is closely monitored to assess both the learning rate and level of performance of individual students. Educational decisions about the intensity and duration of interventions are based on individual student response to instruction. RTI is designed for use when making decisions in preschool, general education and special education, creating a well-integrated system of instruction and intervention guided by child outcome data.

For more information on Response-to-Intervention visit the RTI Action Network at www.RTInetwork.org.

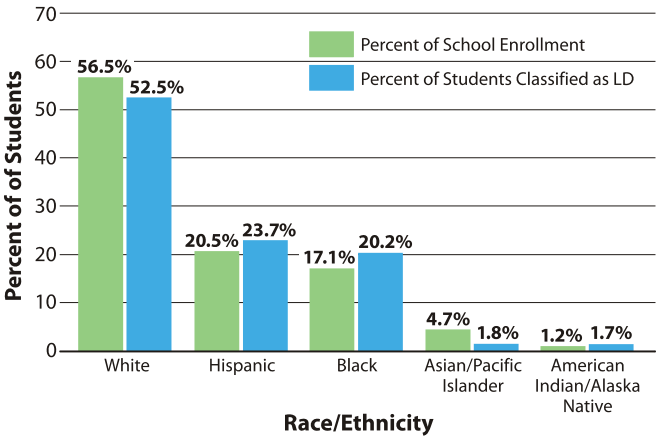
Disproportionality

Disproportionality is the over- or under-representation of minority students in special education. In other words, there is a disproportionate number—either a significantly larger or smaller percentage—of students from a specific minority background receiving special education services than the percentage of that minority in the population generally.

According to school-reported data, learning disabilities do not fall evenly across racial and ethnic groups. Both Hispanic and Black students are over-represented while Asian/Pacific Islander students are significantly under-represented.

The National Longitudinal Transition Studies (see box) found a significant increase in the percent of students with identified LD ages 15-17 who did not use primarily English at home—changing from just 1.3% in 1987 to 15.4% in 2001. The demands of communicating in two languages and accommodating two cultures could contribute to some degree in the disproportionate number of Hispanic students classified as LD.

Race/ethnicity distribution



Source: IDEAdata.org, 2007 Child Count

Gender

Male students with LD who get special education services far outnumber their female counterparts: almost two-thirds of 6-to-17-year-old schoolchildren in this category are boys, despite an almost even split among males (51.4%) and females (48.6%) in the overall public school population. Males with disabilities are known to have poorer classroom engagement behaviors and are more likely to face in-school disciplinary actions and arrest in the community.

National Longitudinal Transition Studies

The U.S. Department of Education has funded two groundbreaking studies on the experiences of secondary school students with disabilities nationwide. The National Longitudinal Transition Study (NLTS) was conducted from 1985 through 1993 and tracked, collected data from, and reported on the experiences of more than 8,000 secondary school students with disabilities nationwide. The National Longitudinal Transition Study-2 (NLTS2), a follow-up of the original NLTS, includes 12,000 youth nationwide who were ages 13 through 16 at the start of the study (2000). Information collected over 10 years from parents, youth, and schools is providing a national picture of the experiences and achievements of young people as they transition into early adulthood.

For more information on the NLTS and NLTS2 visit www.NLTS2.org.

Retention

Students with disabilities—including those with LD—are much more likely to be retained in grades than their peers who don't have disabilities. According to parental surveys in the NLTS2, almost one-third of students with disabilities had been held back in a grade at least once. The estimated retention rate for all students is significantly lower. In 2004, US Census data revealed that 9.6 percent of US youth ages 16-19 had been retained in grade one or more times.

School-age children with disabilities who are retained in grade are disproportionately Black and from lower-income households. The National Association of School Psychologists (1998) noted that retention is linked to increased behavior problems that become more pronounced as children reach adolescence.

Retaining students who are struggling can delay the prompt identification of LD. Studies confirm that retention is sometimes used before diagnostic testing—

testing that can point schools toward effective remedial help for specific learning problems. Retention is also known to highly correlate with dropping out of school. In fact, dropouts are five times more likely to have repeated a grade than high school graduates. Students who repeat two grades have a possibility of dropping out that is near 100 percent. Thus, the high rate of grade retention among students with disabilities may be directly related to the unacceptably high drop-out rate of this group.

Behavioral Challenges

Behavior is a major challenge for many youth with learning disabilities. The NLTS2 found that one-third of LD youths are suspended or expelled from school at some point. According to school-reported data, students with LD accounted for 52% of all students with disabilities who experienced disciplinary actions (in or out of school suspension or expulsion) during the 2006-2007 school year. A little more than 578,000 students with LD faced such actions—representing 22% of all students identified with LD. In some districts, students with disabilities are two to three times more likely to be subject to discipline than students without disabilities.

The zero tolerance approach to school discipline—such as the expulsion or suspension of students as an automatic consequence of serious acts of misconduct, particularly the possession of weapons or drugs—negatively impacts minority students and students with disabilities to a greater degree than other students. Studies have shown that these students constitute a disproportionately large percentage of expulsions and suspensions. Meanwhile, the disciplinary actions restrict access to appropriate education, often exacerbating the problems of students with disabilities and achievement difficulties, and thereby increasing the probability that these students will not complete high school.

Many students both with and without disabilities who pose serious behavior problems end up in the juvenile justice system, where the problems are often exacerbated. A disproportionately high rate of incarcerated juveniles (over 14%) are identified with LD. In fact, LD is the second most common disability found among incarcerated juveniles.

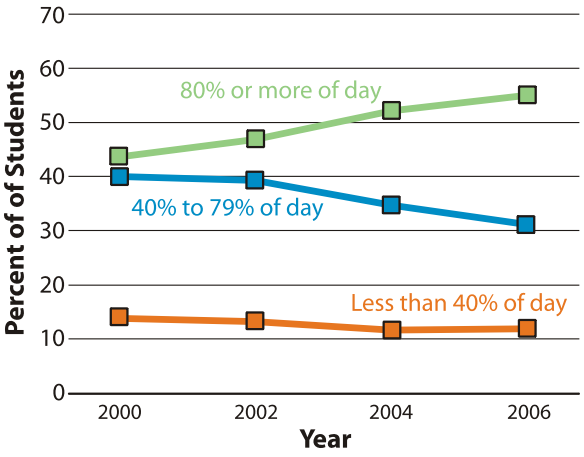
While the IDEA provides students with disabilities certain protections from disciplinary actions such as expulsion when their misconduct is directly related to their disability, this high rate of disciplinary actions suggests the need for more systemic approaches to controlling school conduct, including school-wide systems of support that include proactive strategies for defining, teaching, and supporting appropriate student behaviors to create positive school environments. Such approaches have been developed and demonstrated to be highly effective—not just for students with disabilities but for all students.

Instructional Environments

Over the years, the trend has been for more and more students with disabilities—including LD—to spend most of their instructional time in general education classrooms. The practice of educating students with disabilities in general education classrooms along with typical students—frequently referred to as "inclusion"—is associated with better outcomes for students with disabilities. The IDEA also requires that students with disabilities be educated with students who are not disabled to the maximum extent appropriate. Special classes, separate schooling, or other removal from the regular educational environment should occur only if the nature or severity of the disability is such that education in regular classes with the use of supplemental aids and services cannot be achieved satisfactorily.

Between 2000 and 2006, the percentage of students with LD who spent more than 80% of their time in regular school classrooms rose steadily, from 40% to 55%. In 2007, 59% of students with LD spent more than 80% of their school day in general education. No other category of special education students—except students with speech or language impairments—had higher percentages spending more time in general education than students with LD. However, examining the rate of inclusion among states reveals significant variance. According to information collected by the U.S. Department of Education, the percentage of students with LD who spend 80% or more of their school day in general education ranges across states from a high of 86% in Alabama to a low of 18% in Hawaii.

Where students with LD spend their school day, 2000-2006

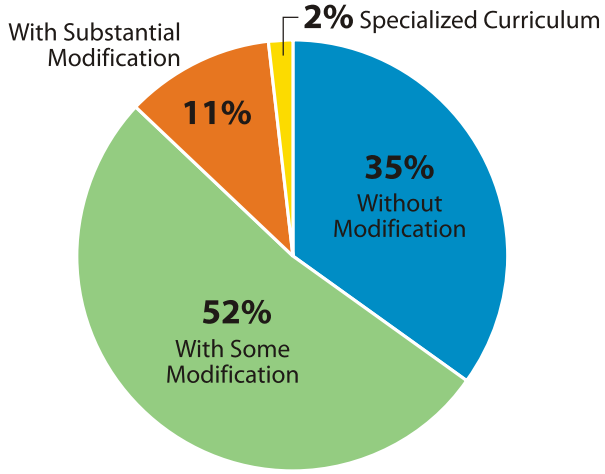


Source: State Reported data to OSEP (DANS), retrieved from www.ideadata.org

Curricula Modifications

According to the NLTS2, few students with LD receive substantial modifications to the curriculum in general education classes. One-third (35%) use the general education curriculum without any modification while half (52%) receive some modification. Only 11% use the general education curriculum with substantial modification and just 2% use a specialized curriculum.

Extent of curriculum modifications for students with LD in general education academic classes



Source: National Longitudinal Transition Study 2

Technology Use

Access to technology supports within general education classes seems to be yet another difficulty for students with LD. The NLTS2 found that just 6% were using a computer for activities (when computer use wasn't allowed for other students), only 8% were using recorded text such as books on tape and just 1% were using computer software designed for students with disabilities. In 1999, AT researcher Diane Golden estimated that only 25%-35% of students with LD were using any type of assistive technology to support their instruction.

Teacher Training and Support

Though most students with LD receive most of their instruction in general education classes, only 60% of students with LD have general education teachers who receive any information about their needs, indicating a need for more teacher training on the characteristics and instructional strategies essential to success for these students. Only about half of all students have teachers who receive advice from special educators or other staff on how to meet those needs.

According to one national survey *(Quality Counts 2004: Count Me In, Education Week)*, just 57% of special education teachers claimed to be "very" familiar with the academic content their states require them to teach. Just seven states mandate that the Individualized Education Programs (IEPs) for students with disabilities conform with state content standards. Receiving instruction from teachers who are knowledgeable about state academic content standards is crucial if students with LD are to be able to perform proficiently on state assessments.

Another study *(Study of State and Local Implementation and Impact of IDEA)* took a look at the preparedness of general and special education teachers as reported by school principals in the 2004-2005 school year. In that study, fewer than half of the principals surveyed (43%) reported that most general educators were well prepared to improve the performance of students with IEPs and increase access to the general education curriculum (41%).

Quality instruction for students with LD also relies on teachers trained and certified in special education, specifically learning disabilities. Latest data from the U.S. Department of Education (2006) indicate that 11% of special educators are not highly qualified (as defined by IDEA). According to the American Association for Employment in Education, the nation has experienced a shortage of special educators trained in learning disabilities each year throughout the decade 1996-2006.

The shortage of qualified special education teachers is compounded by an attrition rate that significantly outpaces that for general education teachers. Attribution is particularly high among beginning special education teachers. Districts frequently cope with these chronic shortages and turnover issues by:

- Employing uncertified/substitute teachers;
- Raising caseloads;
- Increasing use of paraprofessionals.

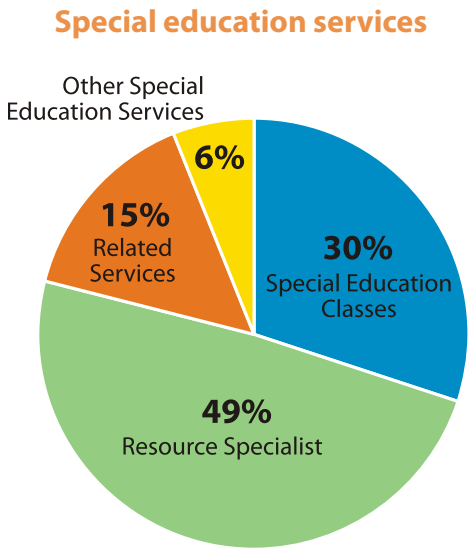
Cost of Special Education

The cost of delivering special education is the subject of much discussion and consternation. Because states are charged with the responsibility of identifying and serving children with disabilities by way of the federal law IDEA yet receive federal funds to pay for only a portion of the cost of serving students, some policy officials and school administrators refer to special education as an "unfunded mandate." This presumption is at best an exaggeration and at worst a misstatement given that students with disabilities have an equal right to a free public education under the Fourteenth Amendment of the U.S. Constitution. The federal law mandating access to public education for students with disabilities grew out of state-level litigation involving massive denial of access to schools for students with disabilities.

Claims regarding the cost of special education can also be somewhat exaggerated. A comprehensive study of special education expenditures in the 1999–2000 school year *(Total Expenditures for Students with Disabilities, 1999-2000: Spending Variation by Disability, Special Education Expenditures Project or SEEP)* found the cost to provide education, including special education to students with LD, was 1.6 times the expenditure for general education students—the lowest expenditure of all disability categories.

Of the amount spent on special education services for students with LD, 49% was attributable to resource specialist services—a way of serving students included in general education classes by providing some level of supplemental services, generally in basic skills such as reading and math—rather than in separate special education classes.

Given that this group represents a substantial portion of all students receiving special education, the overall cost of special education might be overstated by many states and districts. Since students with disabilities are entitled to the same per pupil expenditure as that spent on general education students—regardless of what that expenditure provides—only the excess cost of educating students with disabilities should be considered as special education costs.



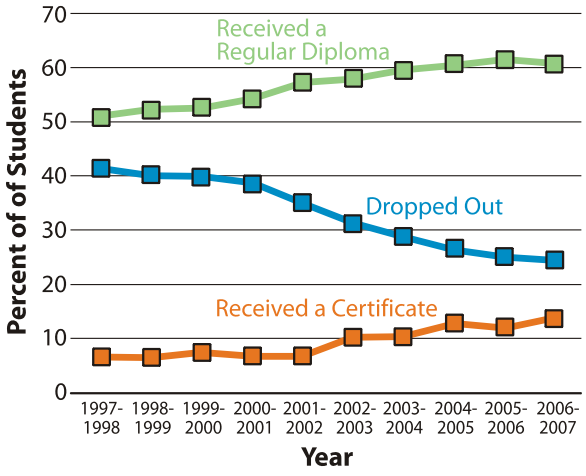
Source: Total Expenditures for Students with Disabilities, 1999-2000: Spending Variation by Disability, Special Education Expenditures Project

Graduation

The rate at which students with LD leave high school with a regular high school diploma has been gradually rising for a decade, yet still remains well below the graduation rate for students without special education status. Ten percent more students received a regular high school diploma in 2007 than in 1997 (61% vs. 51%).

The number of students with LD receiving a certificate of completion (something other than a regular high school diploma) has increased dramatically over the past decade. Just 7% of students received a certificate in 1997; in 2007 that percentage doubled to 14%. This may be due in part to the increase in the number of states instituting several diploma options (i.e. alternative means of graduating from high school other than a regular high school diploma) such as a "certificate of completion" over the past decade. This expanding array of differentiated or alternative diplomas is, to a large extent, a response to the high school exit exams more and more states are requiring all students to pass in order to receive a regular high school diploma. Since such exams pose difficulty for several groups of students, including students with disabilities, many states offer alternative diplomas. Some alternatives are available to all students, while others are reserved only for students with disabilities.

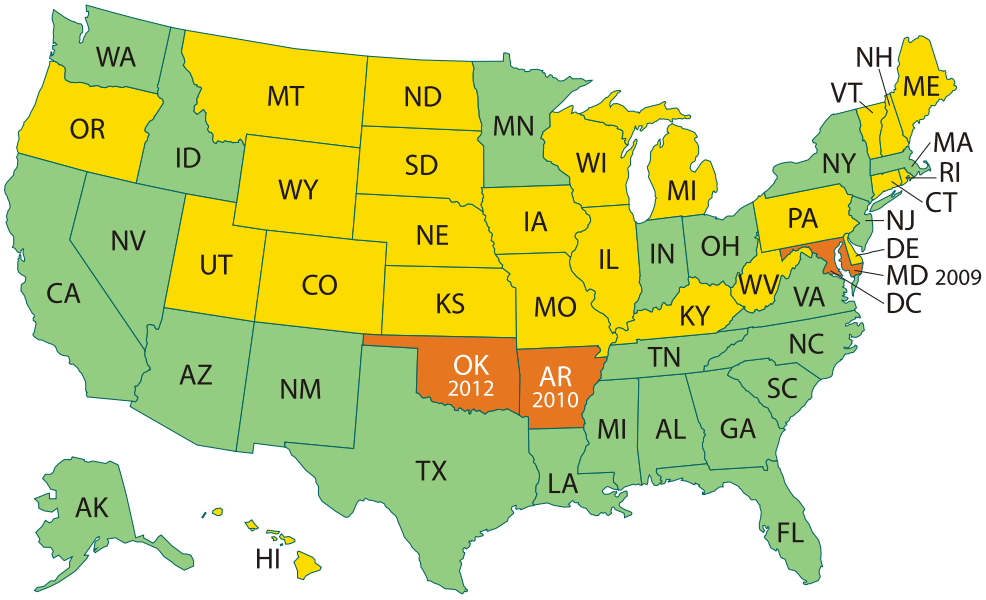
How students with LD exit high school



Source: www.IDEAdata.org, 2007 Child Count

Currently, 26 states either implement or plan to implement high stakes exit tests. The majority of high school students are affected by these tests—with 68% of the nation's public high school students living in states that already have a high school exit exam in place. By 2012, that number will rise to 74%.

States with mandatory exit exams



States with madatory exit exams in 2008:
AL,AK, AZ, CA, FL, GA, ID, IN, IA, MA, MN, MS, NV, NJ, NM, NY, NC, OH, SC, TN, TX, VA, WA (23 states)

States phasing in exit exams by 2012 but not yet withholding diplomas:
AR (2010), MD (2009), OK (2012) (3 states)

States with no madatory exit exam:
CO, CT, DE, DC, HI, IL, IA, KS, KY, ME, MI, MO, MT, NE, NH, ND, OR, PA, RI, SD, UT, VT, WV, WI, WY (24 states and DC)

Source: Center for Education Policy 2008

Several legal challenges have been raised regarding the participation of students with disabilities in high stakes exit exams. The more recent challenges have focused on the provision of appropriate test accommodations for students with disabilities, so that they may have an equal opportunity to show their knowledge. These challenges have met with varied success.

- In some cases, states have agreed to exempt students with disabilities from exit exams—allowing them to be awarded a diploma without meeting the requirements.
- Some states reduce the number of credits needed or lower the performance criteria for a regular diploma for students with disabilities.

Such approaches could set up situations that could result in less than adequate attention to the academic success of students with disabilities and lead to lowered expectations.

Because students with LD have high dropout rates and experience negative outcomes when they do not have a high school diploma, the alternate types of diplomas offered in many states may provide some benefit to students. However, the impact of these alternative diplomas on postsecondary education and employment opportunities may be significant. For example, whether options such as certificates, IEP/special education diplomas, occupational/vocational diplomas, and other alternative types of diplomas equate to a high school diploma—particularly in relation to future adult outcomes, and access to postsecondary education and to future employment and earnings—is not well understood.

Equally relevant is the potential these alternatives pose with regard to lowering expectations for students with LD. For example, decisions about what type of diploma students with LD should pursue might be made too early in the student's school career and might be based on the path of least resistance versus a more rigorous path required to obtain a regular diploma. Clearly, the impact of high stakes exit exams and alternative diploma routes on students with disabilities needs further study and closer scrutiny.

Access to Accelerated Programs

In addition to graduation policies that might contribute to lowered expectations for students with disabilities, in late 2007 the U.S. Department of Education(USED) acted upon reports of school policies that restricted access for students with disabilities to accelerated programs such as Advanced Placement and International Baccalaureate classes.

Specifically, it has been reported that some schools and school districts had refused to allow qualified students with disabilities to participate in such programs. Reports also indicated that schools and school districts, as a condition of participation in such programs, had required qualified students with disabilities to give up any specialized services that had been designed to meet their individual needs as a condition of their participation. In response, the USED Office for Civil Rights (OCR) issued a "Dear Colleague" letter clarifying that limiting access by students with disabilities to challenging academic programs on the basis of their disability violates both Section 504 and the ADA. Additionally, it was made clear that the imposition of conditions on participation in accelerated classes or programs by qualified students with disabilities (e.g. the forfeiture of necessary special education or related aids and services) amounts to a denial of a free appropriate public education under both IDEA and Section 504. (Source: USED OCR, December 26, 2007)

Dropping Out

The drop-out rate for students with LD has fallen steadily over the past decade. While 41% of students with LD dropped out of school in 1997, about one-quarter (24%) dropped out in 2007. Some of this decline is due to the rise in awarding of alternative types of certificates discussed earlier. While the drop-out rate has shown significant improvement, students with LD continue to drop out of school at a rate much higher than students without disabilities. Among all students with disabilities, those with LD experience one of the highest drop-out rates—only one other category of students (Emotional Disturbance, or ED, at 44%) has a higher drop-out rate.

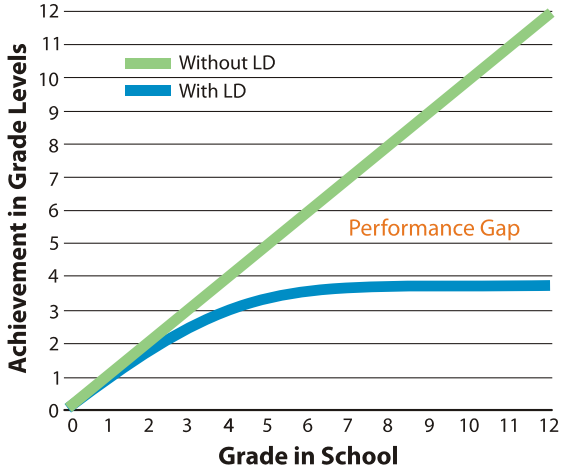
Academic Skill Deficits

Academic achievement for students with LD at the secondary level is significantly below grade level in both reading and mathematics according to the NLTS2.

- In both academic areas, at least a fifth of students with LD are five or more grade levels behind their enrolled grade.
- Close to half of students with LD (45% for reading, 44% for math) test more than three grade levels behind.
- Nearly a quarter (23% for both academic areas) are at least one grade level behind.

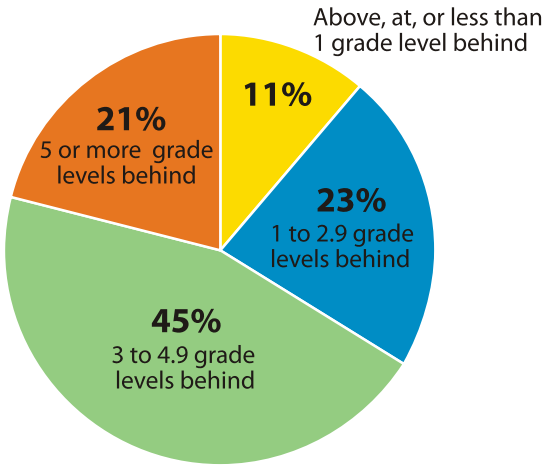
On average, students with LD are 3.4 years behind their enrolled grade level in reading and 3.2 years behind in math. These discrepancies validate researchers' findings that the achievement gap between students with LD and those without widens as students move from one grade to the next.

Achievement gap between students with LD and students without LD



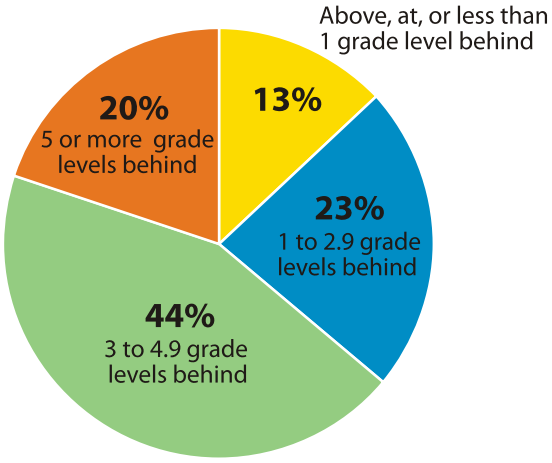
These discrepancies are also significant given how dependent learning in any subject is on sound skills in reading and math. Accessing, understanding, and mastering academic subjects when basic skills are significantly below grade level pose major challenges for students with LD. The frustration and low self esteem that can result from incomplete or poorly developed reading and math skills could contribute to the high drop-out rate among students with LD.

Discrepency between tested and actual grade level in Reading



Source: National Longitudinal Transition Study 2

Discrepency between tested and actual grade level in Math



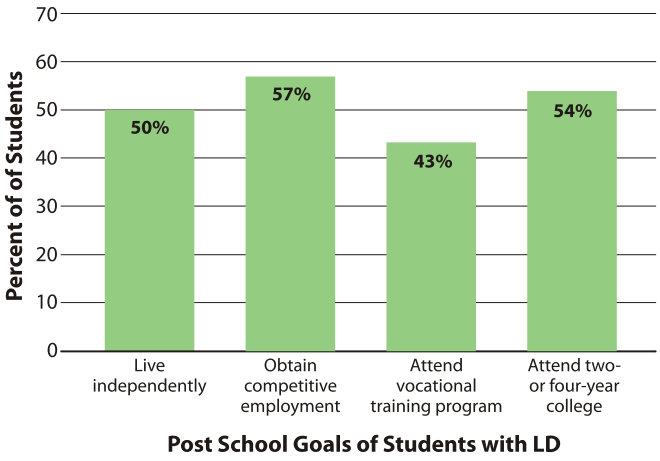
Source: National Longitudinal Transition Study 2

Post School Aspirations

Students with LD express goals for post-high school life that are very similar to students without LD. A majority (54%) have the goal to attend a two- or four-year college, 43% would like to attend a vocational training program. More than half (57%) want to obtain competitive employment while half (50%) want to live independently.

Parents of students with LD express expectations different from those of students. Among parents of students with LD, few expressed confidence that their child would graduate from either a two- or four-year college (14% and 10% respectively). This is in sharp contrast to the 54% of students w/ LD who had a stated goal of attending

Post school goals of students with LD



Source: National Longitudinal Transition Study 2

National Assessment of Educational Progress (NAEP)

The only nationally administered measure of student academic achievement in reading and math—the National Assessment of Educational Progress, or NAEP—indicates some improvement is occurring among students with disabilities. While students without disabilities performed at a proficient level twice the rate of students with disabilities on the 2007 NAEP for Grade 4 reading, those with disabilities made substantially larger gains in their scores than non-disabled students.

		NAEP 2000 vs. 2007 Change in % performing at or above basic	
		Students without disabilities	Students with disabilities
Reading	4th Grade	+8 (31% vs. 35%)	+14 (22% vs. 36%)
	8th Grade	-1 (79% vs. 78%)	-1 (36% vs. 35%)
Math	4th Grade	+16 (69% vs. 85%)	+30 (30% vs. 60%)
	8th Grade	+8 (67% vs. 75%)	+13 (21% vs. 34%)

Students scoring at or above proficient :

- In 4th grade, 36% of students with disabilities performed at or above basic, proficient or advanced reading levels, up from 22% in 2000. The figure for students without disabilities who matched or surpassed those proficiency levels was up 8% (from 62% to 70%) during the same period.
- In math, 60% of 4th grade students with disabilities met or exceeded basic, proficient or advanced levels—double the percentage (30%) from 2000. The portion of the non-disabled student population that was at or above the basic, proficient or advanced standard improved 16% during the same period (from 69% to 85%).
- Also in math, 34% of 8th grade students with disabilities scored at or above the basic, proficient or advanced levels, up from 21% in 2000. Among students without disabilities, the percentage who did that well went up 8%, from 67% to 75%.

There is a continuing concern that the NAEP sampling does not include enough students with disabilities. The Government Accountability Office (GAO) reported that about 40% of students with disabilities who were selected to participate in the sampling were excluded from participating in the testing. This issue and its underlying causes are currently under investigation by the National Assessment Governing Board, the group that oversees the NAEP.

either a two- or four-year college. Parental expectations are important because research has found them to be associated with both student achievement and post-school outcomes. Unfortunately, low parental expectations align more with current levels of post-secondary success than do the expectations that students with LD have for themselves.

According to the IDEA, planning for transition to post-school life is a required part of every student's Individualized Education Program (IEP) and must begin no later than age 16. Transition planning involves the development of appropriate measurable postsecondary goals based on age-appropriate transition assessments related to training, education, employment, and, where appropriate, independent living skills. The particular services needed to assist in reaching those goals must also be articulated in the student's IEP. Services can include course of study (such as those courses needed to qualify for postsecondary education), related services, community experiences, employment, daily living skills, and functional vocational evaluations.

The development of a student's transition plan, including specific goals and services needed to achieve those goals, is intended to be a team process that includes the teacher, parent, student, and representatives from outside agencies as required. However, according to the NLTS2 findings, almost half of parents (45%) reported that school staff alone most often determined the student's transition goals and the team process determined the goals only about one-third of the time. The majority (65%) of parents reported that the transition planning for their child was either somewhat useful, not very useful or not useful at all, while 35% reported it to be very useful. One-third of parents reported that they would want more involvement in the IEP and transition planning process while two-thirds felt they had the right amount of involvement.

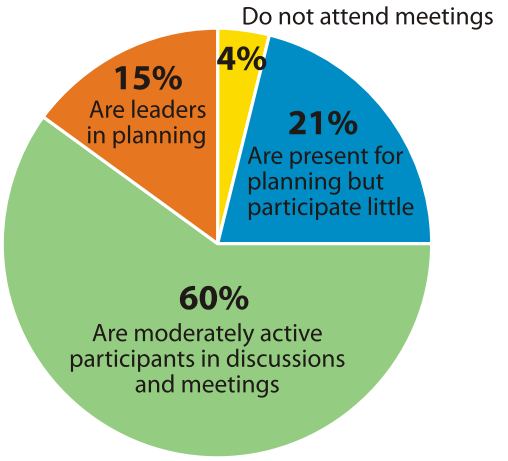
Student participation in the transition planning process is considered critical for success, yet meaningful student participation was reported as infrequent by students with LD interviewed as part of the NLTS2. While most (96%) of students attend IEP meetings involving transition planning, the majority participate little or moderately (81%) while only a handful (15%) take an active leadership role in planning. Additionally, information on the contacts made with service providers and other outside organizations that can assist school personnel with transition efforts for students with LD indicate a relatively low level of involvement.

Parental expectations

	Percentage of parents who think the student:	
Expected to:	Definitely will	Definitely/ Probably won't
Graduate from high school with a regular diploma	59	11
Graduate from a 2-year college	14	57
Graduate from a 4-year college	10	64
Get a paid job	93	1
Live independently	62	8

Source: National Longitudinal Transition Study 2

Participation in transition planning by students with LD



Source: National Longitudinal Transition Study 2

Contacts made by schools on behalf of students with LD for Transition Planning

Two- or four-year colleges	26%
Vocational schools	26%
Potential employers	17%
Military	18%
Job placement agencies	21%
Other vocational training programs	27%
Vocational Rehab agency	34%
Other social services agencies	12%

Source: National Longitudinal Transition Study 2

After leaving high school, young people with LD report a high level of engagement in the community. Some 86% of youths with LD who are out of school for up to two years report some type of engagement. Employment tops the list, with 54% engaged in employment only. While 22% are engaged in both work and some type of postsecondary education, just 5% are engaged in postsecondary education only. Another 5% are engaged in some sort of job training or other activity. While encouraging, these findings also reveal that 14% of students with disabilities are not engaged in their community—either by employment or postsecondary education—in the early years following high school.

Community engagement after high school

Employment only	54%
Postsecondary education only	5%
Employment and postsecondary education	22%
Job training or other activity	5%

Source: National Longitudinal Transition Study 2

Postsecondary Education

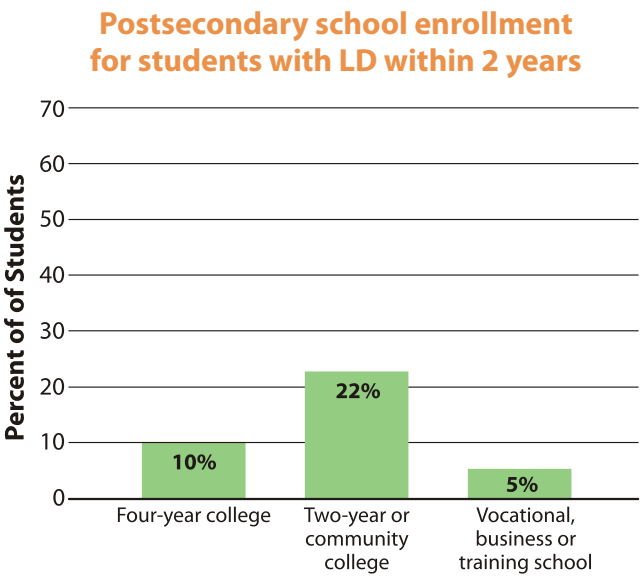
Despite the requirements for transition planning in the IDEA as discussed earlier, major obstacles remain for students wishing to continue their education beyond high school. There are major disconnects between high school and postsecondary education; most important among them include:

- **Different Legal Frameworks:** While school-age students are covered by the IDEA, the legal framework for postsecondary education is quite different. Colleges and universities are guided by two civil rights laws—Section 504 and the ADA (see box on page 4). Neither of these laws requires any type of individualized or specialized educational services (such as those outlined in student IEPs under IDEA). Protections and services guaranteed by Section 504 and the ADA are dependent on self-disclosure and limited to reasonable accommodations.
- **Inconsistent Documentation Requirements:** Documentation of the presence of a disability and its impact on learning is required to access supports and services at colleges and universities. According to a recent report by NJCLD, current assessment practices in high school do not always create documentation that is consistent with the requirements of postsecondary institutions. Furthermore, IDEA does not require that high schools conduct or update evaluations in order to generate documentation required by postsecondary institutions. Consequently,

students with LD often find themselves unable to fulfill the postsecondary institution's requirements with available assessment information from high school. Complicating this issue further is the lack of uniformity across colleges and universities in determining whether an individual qualifies as a person with a disability under Section 504 or Title II of the ADA and is therefore eligible to receive services and accommodations. Lastly, there is a lack of consistency across postsecondary education settings regarding the supports and services available to students with documented LD, making it challenging for students to identify institutions that will provide appropriate services.

A lack of preparedness for success in postsecondary education combined with the challenges mentioned above result in relatively low numbers of students with LD enrolling in postsecondary education.

The NLTS2 found that only one in three (33%) students with LD were enrolled in any postsecondary school within two years of leaving high school. Those enrolled in a four-year college were a mere 10%, while those enrolled in a two-year/community college or vocational/business or technical school were 27%. Students with disabilities—including LD—enroll in two-year community colleges at much the same rate as those without disabilities yet youth without disabilities are more than four and one-half times as likely as youth with disabilities to attend four-year institutions. This could be due in large part to the limited ability of students with LD to satisfy admission criteria at four-year colleges and universities.



Source: National Longitudinal Transition Study 2

According to the Office for Civil Rights (OCR) at the U.S. Department of Education, under Section 504 and Title II of the ADA, postsecondary schools are required to provide appropriate academic adjustments as necessary to ensure that the institution does not discriminate on the basis of disability. However, as noted earlier, students must disclose their disability to the college in order to access academic adjustments. Disclosure of a disability is always voluntary. The NLTS2 found that more than half (52%) of students who received special education services during high school did not consider themselves to have a disability by the time they transitioned to postsecondary education and, therefore, did not seek any type of accommodations. An additional 7% considered themselves to have a disability but chose not to disclose it.

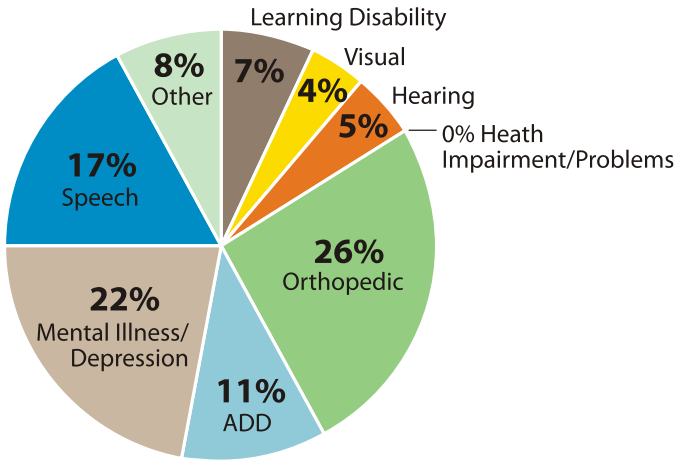
Given these low rates of self-disclosure, it is not surprising that only one-third (35%) of students with disabilities in postsecondary education received any type of adjustments, accommodations, or learning aids from their schools. Among those who did receive services or accommodations, most found such supports to be very useful (29%) or somewhat useful (64%) while 27% reported needing more help.

A national survey of undergraduates enrolled in all U.S. postsecondary institutions in 2003-2004 (2003-2004 National Postsecondary Student Aid Study or NPSAS:2004) indicated that just over 11% of undergraduates reported having some type of disability. Of that 11%, 7.5% reported having a learning disability, 11% reported having attention deficit disorder (a condition often coexisting in students with LD), while 22% reported mental illness or depression. The gender of those reporting a disability mirrored the overall undergraduate gender distribution—42% were female and 58% were male.

Among those reporting some type of disability, more were attending two-year institutions than those without any disabilities. Sixty-two percent reported receiving some type of financial aid (vs. 63% of those without disabilities).

Students reporting a disability were less likely to be attending full-time and full-year (36%) as compared to those without a disability (42%).

Types of disabilities reported by undergraduates who reported a disability



Source: 2003-2004 National Postsecondary Student Aid Study

Employment

While more than two-thirds (69%) of students with LD had a transition goal of obtaining competitive employment after high school, only 46% had regular paid employment when surveyed within two years of leaving school according to the findings of the NLTS2.

However, this lack of paid employment is apparently not the result of employers' unwillingness to provide accommodations in the workplace. As with youth in postsecondary education, young adults with LD rarely disclose their disability to employers or even consider themselves to have a disability at all. Overall, only 4% of young adults who received special education services in high school reported receiving any accommodations or other help from an employer because of a learning problem.

Conclusion

While learning disabilities affect millions of Americans across the age span, the number of identified individuals is most easily determined for school-age children and, to some extent, college-age adults. Studies indicate that few adults identify themselves as having LD, making it difficult to ascertain just how such individuals are faring in key areas such as attainment of higher education, employment status and earnings.

The decline in the numbers of school-age children being identified as LD over the past several years appears to be the result of multiple factors, including a better understanding of reading acquisition, efforts to provide intervention activities before a special education designation is made, and changes in the definitions of disability categories in special education law and regulations. While effective instruction and intervention approaches—such as RTI—may provide early help for children with LD, in some cases ameliorating the need for special education, it also impacts our knowledge about the numbers of young people who are affected.

Despite a decline in the number of school-age children reported to have LD, those identified continue to be disproportionately poor and, to some degree, from minority groups. Students with LD also continue to experience disciplinary actions at a much higher rate than those without LD and to encounter difficulties as a result of inappropriate behavior and conduct. When evidence-based practices exist to help ameliorate these issues—such as Positive Behavioral Instructional Supports (PBIS)—pressure to implement them must be increased. Where knowledge on effective practices and strategies is still needed, these issues must continue to be the focus of research and education agendas.

Increasing the graduation rate of students with LD and reducing the drop-out rate are among the many pressing issues for this group. Given all that is known about the detrimental and life long effects of dropping out, efforts to implement effective drop-out prevention programs should be a top priority of the nation's high schools. Drop-out prevention programs need to be adopted with fidelity on a large scale in order to reduce this silent epidemic that threatens to undermine the success of so many youths with LD. Additionally, the impact of high stakes exit exams and the expanding array of alternate diplomas needs urgent attention to achieve a better understanding of the particular issues challenging school completion.

The NLTS2 has uncovered significant information that should be used to improve instruction, academic achievement, transition and post-school outcomes for students with LD. Among the activities and efforts needing significant improvement, the transition planning process stands out. Transition planning activities must be more heavily influenced by the student and better connected to the skills needed to realize post-school goals. Individuals from other agencies must be more frequently involved in transition planning for students with LD, particularly disability support services personnel in colleges and universities.

Another area of need is the use of technology to support the learning of students with LD. Few would argue the tremendous value of technology, yet far too few students are provided with the necessary assistive technology devices and services as part of their special education program. It seems strangely ironic that sophisticated technologies—such as fMRIs—have advanced the understanding of learning disabilities yet those struggling with the disorder are not being provided the benefits of using even the most basic technology tools to support their learning.

The current level at which young people with LD access and succeed in postsecondary education is unacceptably low. While graduation rates among students with LD are showing slow yet steady improvement, the share of jobs requiring at least some college education has grown from 28% to more than 60% in the past three decades. In fact, the U.S. Department of Education's Commission on the Future of Higher Education claims that "Ninety percent of the fastest-growing jobs in the new knowledge-driven economy will require some postsecondary education." As a college degree becomes more essential for employment success, earnings for high school graduates and dropouts will fall.

Adults with LD can take comfort in the newly restored ADA. Self-identification should be considered whenever reasonable accommodations are essential for job performance. While forthcoming federal regulations as well as future court decisions will help to further clarify and refine the full impact of the ADA Amendments Act of 2008, there is already evidence that these recent statutory changes are having a positive impact on those with LD.

As the nature of LD continues to be better understood and the particular needs of those with these neurological differences is more well defined, success in all aspects of life should become more achievable for a larger number of Americans with LD. Both research and public policy must continue to support such advances.

National Center for Learning Disabilities

The power to hope, to learn, and to succeed.