



EDUCATING STUDENTS WITH DISABILITIES: HISTORY, TRENDS, AND BEST PRACTICES

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Equal Access for Individuals with Disabilities

In the United States, children with disabilities have a right to equal access to quality public-education opportunities that meet their educational needs. In the past, children and adults with disabilities were segregated, warehoused, or denied access to education because of their disabilities.¹ Beginning in the 1970s, however, federal and state policymakers enacted legislation to protect the rights of people with disabilities and improve their access to quality education, leading to considerable improvements in educational access, outcomes, and quality of life for children with disabilities.

Fulfilling our national commitment to educate children with disabilities is challenging and requires public schools to serve students' diverse array of cognitive and physical disabilities. Due to the civil-rights orientation of special-education policy and the role of federal legislation, special education—more than other areas of education—is characterized by a complex web of statutes and regulations, which can be difficult for parents and educators to navigate. At times, these procedures and compliance with them take precedence over the needs of students for effective instruction. Although public schools have made great strides in serving children with disabilities, significant room for improvement remains.

This brief provides a short summary of the historical evolution of special education and related laws, highlights key trends at the intersection of special education and school reform, and outlines effective strategies for educating students with disabilities.

Historical Background

Current special-education policy grew out of the civil-rights movement, including the equal protections established under *Brown v. Board of Education* (1954), and parent advocacy efforts, which led to the passage of key federal laws that continue to define the parameters of special-education practice in U.S. public schools today.² In 1973, Congress passed Section 504 of the Rehabilitation Act, which prohibits recipients of federal funds (including public schools) from discriminating against individuals with disabilities.³ Two years later, the Education of all Handicapped Children Act (since renamed the Individuals with Disabilities Education Act, or IDEA) established a federal-funding stream to help states provide services to children with disabilities.⁴ IDEA establishes public schools as the primary gateway to essential supports and interventions for young children between the ages of 3 and 21 who have disabilities. The No Child Left Behind Act and 2004 reauthorization of IDEA build on this framework by requiring schools to report on, and holding them accountable for, the performance of children with disabilities on state assessments. Under this legislation, basic access and due process are no longer sufficient—schools must also ensure that children with disabilities are making progress in achieving academic goals.⁵

Federal law also establishes several key special-education concepts:

Individualized Education Program

Under IDEA, each child eligible for special education must have an Individualized Education Program. Developed by a team of general and special educators and specialists and the student's

parents, the IEP articulates a school's plan to meet the student's educational needs, including goals for student progress and the specific services that the district will provide.

Free Appropriate Public Education in the Least-Restrictive Environment

Under IDEA and related regulations, public schools are responsible for providing students with disabilities a free appropriate public education (FAPE) in the least-restrictive environment (LRE). Both concepts have been the focus of extensive litigation, including multiple Supreme Court cases.⁶

The concept of a "free" and "appropriate" education means that each child with a disability receives the services and programs selected by their IEP team to meet his or her individual needs, and that these services are paid for by the public-education system, at no cost to the student's family. The extent of services required to constitute an "appropriate" education has been the subject of litigation. Courts have interpreted an "appropriate" education to include a continuum of services and supports necessary to provide a student with a disability access to the general-education curriculum. Districts are not required to provide the "best" educational program, but one that allows a student to make progress. Cost is generally not allowed to be a determining factor in defining FAPE.

"Least restrictive environment" means that children with disabilities should, to the extent possible, be educated in the general-education classroom alongside their peers without disabilities, and be provided with appropriate aids and supports to maximize their access to the general-education curriculum. LRE builds on the civil-rights principle that separate is not equal. Depending on a child's particular disability, meeting the standard of FAPE and LRE can entail educating students in a variety of settings, ranging from spending 100 percent of the school day in a general-education classroom with minimal special aids and supports, to spending 100 percent of the day in a private residential setting with extensive services. Historically, students with disabilities were educated in segregated environments and "mainstreamed" as deemed appropriate, but today, inclusive classrooms are the default position. Students are pulled out of the general-education classroom as deemed appropriate by their IEP team based on their unique needs.

Special Education and Related Services

Special education is defined as modifications and accommodations that enable students to access the general-education curriculum and make academic progress, including individualized instruction, simplified or shorter assignments, and extended time to complete tests. Related services are developmental, corrective, or support services that help students benefit from special education. Examples of such services are speech or occupational therapy, audiology services, counseling, and transportation. Many school personnel see special-education services and supports as detached from the core instructional program. The increasing emphasis on inclusion of children with disabilities, response to intervention, and universal design for learning (concepts discussed later in this brief) means that special education, interventions for struggling students, and high-quality instruction are increasingly integrated along a continuum to meet the needs of all students.

Special-Education Enrollment and Service-Provision Trends

Six and a half million American public-school students ages 3 to 21⁷—roughly 13.2 percent of all students—qualify to receive special education and related services.⁸ Some 294,000 children with special needs from birth to age 2 (about 2.4 percent of all children) receive early-intervention services. From 1976 to 2005, the number and percentage of children enrolled in special-education programs increased steadily, from 8.3 percent to 13.8 percent of all students. Since 2005, there has been a slight decrease in the percentage of students identified with disabilities. Special-education experts credit early interventions for the decrease.⁹ IDEA defines students with disabilities as having at least one of 13 categories of disabilities, including autism, orthopedic impairments, traumatic brain injury, and visual impairments. The largest percentage of students with disabilities—approximately 60 percent—is identified as having either a specific learning disability or speech or language impairments.¹⁰

Consistent with LRE, 96 percent of all students eligible for special education are educated in regular classrooms and are provided with variable levels of services either in their classrooms or on a pullout basis. Inclusion in general-education classrooms has risen substantially: in 2008–09, 54 percent of students with disabilities spent at least 80 percent of their day in their regular-education classroom, up from just 33 percent in 1990–91.¹¹ Inclusion is desirable because it provides students with disabilities access to the same curriculum and expectations as their peers without disabilities. It also provides them with the opportunity to interact with their peers, which can improve social interaction, language development, and behavior. However, research on the educational merits of inclusion for both students with and without disabilities is mixed, and related to the manner in which students are included and to their specific disability.¹² Including students in classrooms absent adequate training of general- and special-education teachers or as a means to reduce costs associated with providing adequate accommodations, modifications, and supports undermines the potential benefits of inclusion.

Special-education enrollment trends are the subject of ongoing policy debates. Four issues are particularly salient: child find and eligibility determinations, overrepresentation of minority students, the achievement gap between students with disabilities and their peers without disabilities, and funding of special education and related services.

Identification and Eligibility Determination

Early identification and intervention is an explicit goal of IDEA, which requires states to identify, locate, and evaluate all children with disabilities, from birth to age 21, who need early intervention or special education. In practice, school districts or other designated public agencies play a central role in fulfilling this responsibility, through continuous public-information campaigns advertising the services that they provide to students and families, and by working closely with early-education specialists to conduct evaluations and provide services.

Within the parameters established by IDEA, states set eligibility requirements for special education and related services. For a child to be eligible to receive special education and related services, his or her educational performance must be adversely affected by a disability. Examples of an adverse effect include a discrepancy between performance and ability, limited progress, evidence of emotional or behavior disturbance, and problems with fine or gross motor skills. The

identification process generally involves an in-depth evaluation designed to assess a student's cognitive abilities and academic performance. The evaluation process is guided by federal and state regulations and subsequent Individualized Education Program meetings according to a specific timeline.¹³ For some types of disabilities that do not entail a medical diagnosis (including specific learning disabilities), the evaluation process is somewhat subjective. Concerns about the extent to which students who had not been taught how to read were referred and determined eligible for special education led to significant changes in the 2004 reauthorization of IDEA aimed at decreasing subjective judgments.¹⁴ For example, the law encouraged the use of a Response to Intervention approach, in which educators monitor the progress of all students and provide increasing levels of interventions before referring children for special education.¹⁵

Overrepresentation of Minorities in Special Education

Students from racial/ethnic minority backgrounds are both under- and overrepresented in special-education programs—an issue that raises significant equity concerns for policymakers.¹⁶ Nationally, 12 percent of white students are identified as eligible for special education, compared with 5 percent of Asian/Pacific Islanders, 11 percent of Hispanics, 14 percent of African Americans, and 13 percent of American Indians. However, there are much larger disparities within specific categories of disability. For example, African American students account for 17 percent of school-age students but 20 percent of students with specific learning disabilities. Hispanic students account for 20 percent of the school-age population but 24 percent of students with specific learning disabilities.¹⁷ While just over 1 percent of Caucasian students are identified as having mental retardation, 2.6 percent of African American students are given this label.¹⁸ Disparities are greatest in disability categories that are more subjective and identified in school as opposed to in a clinical setting (for example, mild mental retardation, emotional disturbance, and learning disabilities).¹⁹

Discrepancies in the rate at which students are identified as having a disability may correlate with a mix of broader social and environmental factors outside of school control, such as differences in access to health care and prenatal care (which may impact cognition and development), as well in-school factors, including educator biases and disparities in the quality of educational programs. The broader academic achievement gap between white and minority students also bears part of the blame for disproportionate identification of minority students with disabilities—particularly among African American students.²⁰ Researchers fear that many minority students are identified with a disability because their schools have not prepared them to succeed.²¹

To the extent that identification for special education enables students to receive services they need, it may be beneficial to them. Conversely, identification can lead to lowered expectations and performance for some students.²² Of particular concern are decisions related to placement that lead to disproportionate numbers of racial and ethnic minorities being placed in more-restrictive learning environments. These placements generally correlate with less robust access to the general-education curriculum and the students' peers without disabilities, thereby further inhibiting educational and social opportunities.²³ Research on practices that influence placement decisions has documented that provision of professional development to general- and special-education teachers regarding accessing the general-education curriculum correlates with less restrictive placements.²⁴

The 2004 IDEA reauthorization took steps to address disproportionality in special education, by outlining factors that may not be used to determine that a child has a disability (for example, lack of appropriate instruction in reading or math, and limited English proficiency) and by requiring districts with disproportionality issues to set aside funds to provide additional supports in early elementary grades. States are also required to collect and examine data regarding representation of specific student sub-groups in special education as well as their placement and incidence, duration, and type of disciplinary actions.²⁵ Independent education-advocacy groups can help to support these efforts by accessing and tracking information on the rates at which students from different backgrounds are being identified for special education, examining placement trends, and educating parents and the public. They can also push districts and states to address disparities through improved prevention and general-education services at schools where black and Hispanic students are disproportionately identified with disabilities.

Achievement Gap

Improved access to education has led to corresponding improvements in outcomes for students with disabilities. Nevertheless, notable gaps remain between the outcomes and opportunities for students with and without disabilities.²⁶ This is to some extent inherent; one of the defining metrics for eligibility to receive special education is a disability that inhibits performance, and the small percentage of students with severe cognitive disabilities cannot be expected to perform on par with their typically developing peers. Yet the gap between achievement of students with disabilities and their peers without disabilities remains far greater than it should be—between 30 and 40 percentage points on state assessments in reading and math.²⁷ Experts estimate that upwards of 75 to 80 percent of students with disabilities—including most students with learning disabilities, by far the most common disability identified—should be able to perform on par with their peers without disabilities if given appropriate instruction and supports.²⁸ Yet proficiency and graduation rates for such students remain far below average.²⁹ Individuals with disabilities also experience higher unemployment rates as adults and do not work full-time at the same rate as their peers without disabilities.³⁰ Ongoing advocacy and professional development for general- and special-education teachers about the potential of individuals with a wide range of disabilities is critical to breaking the cycle of low expectations.

Funding Special Education and Related Services

Special education costs are a source of tension for states and districts struggling to balance school budgets while providing a diverse array of services.³¹ Whereas students with disabilities comprise roughly 13 percent of the school-age population, expenditures devoted to special education represent 21 percent of spending on elementary and secondary education.³² IDEA permits the federal government to provide funding to states to defer the cost of providing special education and related services, and in fiscal year 2011, the federal government provided some \$11.8 billion to states for this purpose, as well as an additional \$813 million in funding for preschool and early-intervention services.³³ The federal allocation amounts to approximately \$1,750 per student with a disability.³⁴ At the time IDEA was enacted, the federal government committed to provide funding for a student with disabilities equal to 40 percent of the average per-pupil expenditure (APPE), but today federal funding per student with disabilities represents less than 16 percent APPE.³⁵ States and local districts are responsible for providing the majority of funding for special education, and while there is notable variability, on average state and districts contribute equally to the total cost.³⁶ The cost to serve a student with disabilities varies

considerably, depending on the child's disability and services called for in the IEP, but researchers estimate that, on average, public schools spend 1.9 times as much to educate a child with disabilities (including both general and special education) as a child without disabilities.³⁷

About 5 percent of children with disabilities—300,000 children—require particularly intense resources. These “high need” or “high cost” students require services that on average cost between 5.5 and 5.8 times the cost of educating a child in general education.³⁸ Although the percentage of children requiring such services is low, the high cost of serving them can be especially burdensome to small schools or districts. To address these high costs, IDEA 2004 allowed states to set aside funds for extraordinary costs. Typically, state funds set aside for “catastrophic,” “extraordinary,” or “disproportionate costs” can be used to reimburse districts for very high special education costs that exceed a particular threshold. For example, a state might reimburse 75 percent of a district's per-pupil costs greater than \$25,000, or 90 percent of costs greater than \$40,000.³⁹

Best Practices for Educating Students with Disabilities

Extensive research has identified specific practices that are effective for students with specific disabilities.⁴⁰ For instance, we know that amplified speech helps students with hearing impairments; speech therapy helps students with language development delays; and graphic organizers help students with attention deficit disorder who struggle with executive function. The U.S. Department of Education sponsors large national research studies that document special-education trends and best practices, and multiple nonprofits (including the IDEA Partnership, the National Center on Education Outcomes, the National Center for Special Education Research, and the National Dissemination Center for Children with Disabilities) maintain websites with extensive information about special-education best practices.⁴¹ Beyond the deep toolbox of specific established special education and related services, some practices and policies have broad value in improving outcomes for students with disabilities.

Early-Childhood Interventions

Research dating back to the early 1960s on the Perry Preschool Study in Ypsilanti, Mich.; the Abecedarian Project in Chapel Hill, N.C.; and the Chicago Longitudinal Study demonstrates that investment in early-childhood education can pay large dividends.⁴² Research on the actual return on investment estimates that every dollar invested in quality early-education programs saves taxpayers \$13 in future costs associated with extra support programs⁴³ and can provide up to \$17 in benefits to recipients in terms of their long-term potential.⁴⁴ Early intervention is particularly valuable for students with disabilities and students at risk of being identified as having a disability.

Early intervention for children with disabilities entails providing targeted services and support to infants, toddlers, and preschool-age children. Effective early-intervention services can diminish the impact of the disability or delay and reduce long-term educational costs by reducing the need for special education and related services for school-age students.⁴⁵ These services can enable students to enter kindergarten on grade level and can lead to significant decreases in referral to special education, juvenile interactions with the law, and substance abuse.⁴⁶

In 1986, Congress amended IDEA to include services for preschool students under Part B and for infants and toddlers with disabilities under Part C. Large-scale research on the programs

has documented that early provision of services improves student outcomes over time.⁴⁷ For instance, infant and toddler interventions increase motor, social, and cognitive function; help develop age-appropriate skills; and diminish the negative impact of disabilities. Furthermore, these interventions contribute to decreases in enrollment in special education; between 54 and 62 percent of young children receiving early intervention exited the programs meeting age-appropriate expectations associated with social relationships, knowledge and skills, and basic-need fulfillment (feeding, dressing, abiding by health and safety norms, and so on).⁴⁸ In addition to the federal funding provided for these programs, states invest significant state funds in preschool and early-intervention services for students with disabilities—more than \$9 billion annually.⁴⁹ Based on economic analyses of the benefits of early interventions, this investment pays considerable societal as well as individual dividends.

Research also indicates that high-quality pre-kindergarten can have a preventative effect, helping reduce the rates at which children are identified for special education once they enter school. Over the past decade, states have made significant investments in expanding access to publicly funded pre-K programs. Evidence that high-quality pre-K reduces later special-education placement and costs is a major part of the rationale for this investment.⁵⁰

Response to Intervention

Response to Intervention is an instructional and monitoring approach that aims to more meaningfully identify students with learning and behavioral problems and improve learning outcomes for all students through provision of high-quality instruction, tracking of student progress, and increasingly intense, evidence-based interventions for struggling students.⁵¹ Rather than waiting for students to fail and then referring them to special education, RtI provides intervention support as soon as students begin to struggle, in the hope that these interventions will enable students to catch up to their peers. Individual approaches to RtI vary, but generally incorporate the following steps:

- screen all students to document their progress;
- assess students in a natural classroom context;
- monitor student progress continuously;
- instruct all students using high-quality, scientifically-based pedagogy;
- implement research-based interventions in tiered levels (large group, small group, and individual);
- provide professional development to ensure teachers are using interventions appropriately and consistently; and
- communicate consistently and continuously across programs and staff about student progress.⁵²

RtI approaches typically include three “tiers” of services to students. The first tier is general classroom instruction provided to all students. The second tier, generally delivered to approximately 15 percent of students who are not meeting expectations, involves small-group instruction. The third and final tier, generally provided to 5 to 8 percent of students, involves focused individualized instruction. Students who continue to struggle after receiving consistent and high-quality individualized instruction are referred for formal special-education evaluation.⁵³

RtI builds on decades of research about the value of early interventions and structured progress monitoring. The approach is credited with reducing the number of students identified

with specific learning disabilities.⁵⁴ For instance, in a random control study, Tier II reading interventions provided to struggling at-risk third-graders as a result of RtI progress monitoring led to significant differences between treatment and control groups on reading speed and accuracy.⁵⁵ A research synthesis of RtI documented that interventions can be effective even when they are provided by low-cost implementers, and that reading gains are sustained over time.⁵⁶

Use of RtI strategies has spread since the 2004 IDEA reauthorization, which allowed states and school districts to spend up to 15 percent of their IDEA funds to support focused intervention efforts before students are referred for special education.⁵⁷ While some schools have traditionally practiced aspects of RtI, effective implementation generally requires providing teachers with professional development related to tiered instruction, allocation of additional staff to provide targeted interventions, and investment in formative assessments to monitor progress. Although RtI may reduce special-education costs over time, by preventing the need for costly remediation, in the short term it requires additional resources, which may be a barrier at a time when districts are struggling with tight budgets or reduced funding. Furthermore, teacher-training programs have been slow to fully embrace RtI as a component of their curriculum.⁵⁸ Critics of RtI argue that while aspects of the approach are steeped in research, robust research into its large-scale implementation has yet to occur.⁵⁹ Ineffective implementation may undermine a rigorous examination of RtI's potential.

Universal Design for Learning

Special education has traditionally been seen as extra or separate from general education. Rather than retrofitting or adding to the general curriculum to accommodate students with disabilities, universal design for learning (UDL) represents a set of principles that guide curriculum development and related classroom practice based on a commitment to providing equal access to everyone as a central component of design as opposed to as an addendum.⁶⁰

Based largely on extensive neuroscientific research regarding learning and cognition, the principles of UDL dictate that curricula should incorporate three key tenets of flexibility, reflecting the broad continuum of learner differences: multiple methods of presentation, multiple options for engagement, and multiple means for action and expression.⁶¹ This is in contrast to a traditional approach in which content is presented in a relatively single-dimensional fashion (for instance, teacher lecture) followed by students' expression of understanding via a written assessment. While relying on a single instructional strategy may work for some students with specific processing skills, those lacking the skills have limited options to learn the content. In contrast, using multiple means of presentation ensures that content is easily accessible to students with a variety of learning styles and benefits students with and without disabilities. According to UDL principles, content is developed to be readily accessible to all students, rather than adapted for specific outliers or exceptions.⁶² Educators do not have to eliminate barriers that might inhibit learning, if they avoid them from inception.

Preparing or purchasing curricula in an electronic format is a central component of UDL because this mode provides teachers greater flexibility in presentation, participation, and assessment.⁶³ For instance, a teacher could offer students the choice to read Martin Luther King Jr.'s "I Have a Dream" speech or watch a video recording of the speech. As with RtI, while children with disabilities generally benefit the most from UDL, all students potentially benefit from access to curricula in multiple forms.

Inclusion of Students with Disabilities in Assessments and Accountability Systems

Section 504 of the Rehabilitation Act and IDEA provide students with disabilities access to schools and the general-education curriculum. But access is no longer enough—schools must also demonstrate that students with disabilities are meeting academic goals. NCLB and the 2004 IDEA reauthorization have pushed schools to meaningfully include students with disabilities in standardized assessments and accountability systems. They also hold schools accountable for the performance of the subgroup of students with disabilities.⁶⁴ The vast majority of students with disabilities are capable of taking regular standardized assessments, with or without accommodations. In recognition that some students with significant cognitive disabilities (estimated to be about 2 percent of students with disabilities) cannot participate in assessments, federal regulations allow states to assess up to 1 percent of all students using alternate assessments. States that meet certain conditions may assess up to 2 percent of all students using modified assessments based on alternate or modified achievement standards.⁶⁵ These regulations could potentially allow states to assess a substantial percentage of students with disabilities using alternate or modified assessments. Alternate or modified assessments are included in a student's IEP based on the severity of their disability and their projected ability to achieve proficiency.

Developing meaningful alternate assessments is technically challenging and has been the focus of extensive research, as policymakers, scholars, and advocates have sought to balance the goal of accountability for outcomes with the practical reality that not all students with disabilities can be reasonably expected to achieve proficiency on standardize tests. All states have developed alternate assessment policies and procedures, and practice has evolved to reflect greater knowledge about how to validly and reliably assess students with significant cognitive disabilities.⁶⁶ To date, 17 states have developed modified alternate assessments; reflecting the challenges of developing appropriate modified assessments, only four have been approved by the U.S. Department of Education.⁶⁷ As states move to adopt Common Core standards, alternate assessment policies will need to continue to evolve to ensure that students with disabilities are part of the accountability equation.⁶⁸

Students with disabilities who take the standard state assessment may be offered assessment accommodations. States must have clear policies for accommodations, document the link between accommodations in instruction and assessments, monitor use of accommodations, and make certain that accommodations don't alter the tests' integrity. Common accommodations include administration of the test to individuals one at a time, to small groups, or in separate study carrels.

Accurately assessing students with disabilities can be challenging, but evidence indicates that NCLB assessments and accountability systems have improved the quality of instruction for students with disabilities and increased their access to general-education curricula by holding districts accountable for learning outcomes for students with disabilities.⁶⁹ This in turn has led to greater participation in assessments and improved outcomes for students with disabilities in both the K–12 and postsecondary-school arenas.⁷⁰ From 2000 to 2005, the score of fourth-graders with disabilities on the National Assessment of Education Progress in reading rose from 167 to 190, a statistically significant increase, while the scores for students without disabilities improved only slightly (217 to 222).⁷¹ Scholars attribute the gains to better alignment of IEPs to state academic standards, improved data collection, increased access to standards-based instruction, increased participation in assessments, requirements for students to achieve at grade level, and motivation to avoid NCLB accountability sanctions.⁷²

General-Education Teacher Preparation Related to Educating Students with Disabilities

Educating students with disabilities in inclusive general-education classrooms provides them with greater access to the curriculum and to teachers with deep content knowledge. The majority of students with disabilities spend most of their day in general-education classrooms. On average, general-education teachers have 3.5 students with disabilities assigned to them.⁷³ Yet, most teachers are ill prepared to educate students with disabilities—a potential Achilles' heel of inclusion and efforts to implement RtI.⁷⁴ On a practical level, many teachers currently in the system completed their training at a time when few students with disabilities were taught in inclusive environments, and so their preparation programs did not include content related to special education. A recent survey of teachers with six or more years of experience documented that only one-third of them had received any pre-service training regarding working with special-education teachers; only half reported receiving any training regarding adapting instruction for students with disabilities. Even among newer teachers, few have received substantive training regarding special education.⁷⁵

Training general-education teachers to educate students with disabilities can improve their comfort and skill level.⁷⁶ For instance, general-education teachers who have received in-service training regarding educating students with disabilities and utilizing specialized materials report feeling far more successful than their peers who have not received such training.⁷⁷ Teacher-preparation programs that integrate general- and special-education teachers in cohorts improve the will, skill, and knowledge of both groups.⁷⁸ Co-teaching—in which a special-education teacher works alongside a general-education teacher in a classroom—can help general-education teachers acquire skills to work more effectively with students with disabilities.⁷⁹ Effectively training general-education teachers to work with students with disabilities has the potential to improve outcomes for these students.

Leveraging Technology to Expand Learning Opportunities

Technology can also help students with disabilities, who benefit from the broader range of instructional options that technology can facilitate.⁸⁰ Extensive research finds that technology-rich intervention classes that enable students to progress at their own pace improve outcomes for students with disabilities, increase course completion, improve behavior, and reduce drop-out rates.⁸¹ Reflecting the value of instructional technologies, the 1997 reauthorization of IDEA required school districts to provide assistive technology to students to support provision of free appropriate public education.

Technology supports for students with disabilities range from assistive technologies that provide greater independence (hearing aids, Braille, speech-recognition programs) to more common computer hardware and software leveraged to expand learning opportunities (online speech therapy). For example, the U.S. Department of Education has invested \$32 million in grant funds to support Bookshare, an online program that provides free electronic copies of books for students whose disabilities prevent them from accessing print. Bookshare modifies the books to accommodate students' unique learning needs (the content can be read aloud, magnified, or presented with different spacing).⁸² Another example is growing adoption of 1:1 programs that integrate iPads into classrooms and leverage extensive applications to support instruction of students with a variety of disabilities.⁸³

Conclusion

In the nearly 40 years since the passage of the Education of All Handicapped Children Act, our collective goals for educating students with disabilities have evolved from general access to public education to the provision of high-quality educational opportunities that prepare students for productive and, ideally, independent lives. Educating students with disabilities is more similar than dissimilar to educating all students: high-quality instruction leads to student learning. But effectively educating students with disabilities requires practitioners to have high expectations and a deep understanding of how to teach and support students with a diverse array of needs, and administrators and policymakers to understand how to navigate the complex web of rules and regulations crafted to protect students' rights to public education. This can be challenging and resource-intensive, but schools' collective commitment to all students reflects the deep conviction to upholding civil rights and equal opportunity. Furthermore, investments in special education provide not just individual but social and economic benefits. Decades of research have provided a solid understanding of how to best educate students with disabilities. Emerging brain research coupled with new technologies hold the promise to not only expand but hopefully dramatically accelerate our knowledge and ability to minimize the impact of disabilities on individuals' educational and life outcomes.

¹ Mitchell L. Yell, David Rogers, and Elisabeth Lodge Rogers, "The History of Special Education: What a Long, Strange Trip It's Been!," *Remedial and Special Education* 19 (1998): 219–28.

² *Brown v. Board of Education*, 347 U.S. 483 (1954).

³ Section 504 of the Rehabilitation Act of 1973, as amended 29 U.S.C. § 794.

⁴ Education for All Handicapped Children Act of 1975, Pub. L. No. 94–142, 89 Stat. 773.

⁵ "Executive Summary of the No Child Left Behind Act" (2001), accessed January 18, 2007, <http://www.ed.gov/print/nclb/overview/intro/execsumm.html>; Individuals with Disabilities Education Improvement Act of 2004, Pub. L. No. 108–446, 118 Stat. 2647 (Amending 20 U.S.C. § 1400 et seq.).

⁶ For more information about key cases, see Yell, Rogers, and Rogers and www.Wrightslaw.com.

⁷ Under federal law, students with disabilities have a right to public education services until they are 21.

⁸ National Center for Education Statistics, "Children and Youth with Disabilities: (Indicator 7-2011, Washington, DC: National Center for Education Statistics, 2011), accessed December 12, 2011, http://nces.ed.gov/program/coe/indicator_CWD.asp.

⁹ Christina A. Samuels, "Learning-Disabled Enrollment Dips After Long Climb," *Education Week* (September 15, 2011): 1, 14–15.

¹⁰ More specifically, 38 percent of students with disabilities are identified as having a specific learning disability, 22 percent had speech or language impairments, 10 percent had other health impairments (that is, limited strength, vitality, or alertness due to chronic health problems; and an educational performance negatively affected by those problems, manifesting in attention deficit disorder, hyperactivity, diabetes, epilepsy, heart conditions, and the like). Students with intellectual disabilities, emotional disturbances, developmental delay, and autism each account for between 5 and 7 percent, while those with multiple disabilities; hearing, orthopedic, and visual impairments; traumatic brain injury; and deaf-blindness each account for 2 percent or less of students receiving services under IDEA (National Center for Education Statistics, "Children And Youth with Disabilities").

¹¹ U.S. Department of Education. *Data Analysis System*, OMB #1820-0557: "Part C, Infants and Toddlers Receiving Early Intervention Services in Accordance with Part C of the Individuals with Disabilities Education Act" (Washington, DC: Office of Special Education Programs, 2006); National Center for Education Statistics, "Children and Youth with Disabilities."

¹² Kenneth A. Kavale and Steven R. Forness, History, Rhetoric, and Reality: Analysis of the Inclusion Debate," *Remedial and Special Education* 21, no. 5 (2000): 279–96; Spencer H. Salend and Laoreal M. Garrick Duhaney,

“The Impact of Inclusion on Students With and Without Disabilities and Their Educators,” *Remedial and Special Education* 20, no. 2 (1999): 114–26; E. T. Baker, M. C. Wang, and H. J. Walberg, “Synthesis of Research: The Effects of Inclusion on Learning,” *Educational Leadership* 52, no. 4 (1995): 33–34.

¹³ U.S. Department of Education, “Building the Legacy: IDEA 2004 Regulations” (Washington, DC: U.S. Department of Education, 2004).

¹⁴ Individuals with Disabilities Education Improvement Act of 2004, Pub. L. 108–446; <http://idea.ed.gov/explore/view/p/,root,regs;Samuels>.

¹⁵ National Association of State Directors of Special Education, “Response to Intervention: Policy Considerations and Implementation” (Alexandria, VA: National Association of State Directors of Special Education, 2005) accessed December 12, 2011, <http://www.nasds.org/Projects/ResponsetoInterventionRtIProject/tabid/411/Default.aspx>.

¹⁶ A. Kirby, Wayne Heller, H. Holtzman, and Samuel Messick, eds., *Placing Children in Special Education: A Strategy for Equity* (panel on Selection and Placement of Students in Programs for the Mentally Retarded, Committee on Child Development Research and Public Policy, Commission on Behavioral and Social Sciences and Education, Washington, DC: National Academies Press, 1982); M. Sharon Donovan and Christopher T. Cross, eds., *Minority Students in Special and Gifted Education* (Division of Social Sciences and Education, National Research Council, Washington, DC: National Academies Press, 2002).

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