

# Journal of School Choice

## International Research and Reform

ISSN: (Print) (Online) Journal homepage: [www.tandfonline.com/journals/wjsc20](http://www.tandfonline.com/journals/wjsc20)


# Charter Schools and Special Education: Systemic Challenges and Opportunities for Innovation

Katharine Parham Malhotra

**To cite this article:** Katharine Parham Malhotra (22 May 2024): Charter Schools and Special Education: Systemic Challenges and Opportunities for Innovation, Journal of School Choice, DOI: [10.1080/15582159.2024.2353423](https://doi.org/10.1080/15582159.2024.2353423)

**To link to this article:** <https://doi.org/10.1080/15582159.2024.2353423>

 [View supplementary material](#) 

 [Published online: 22 May 2024.](#)

 [Submit your article to this journal](#) 


 [Article views: 8](#)

 [View related articles](#) 

 [View Crossmark data](#) 



# Charter Schools and Special Education: Systemic Challenges and Opportunities for Innovation

Katharine Parham Malhotra 

Teachers College, Columbia University, New York, NY, USA

## ABSTRACT

Both charter schools and special education are systems designed to improve the educational experiences of a specific subset of students. However, one system was borne of the goal of increased school autonomy while the other necessarily requires compliance with myriad state and federal regulations. This article explores the resulting tension between the two and the unique challenges charters face in educating students with disabilities, including legal constraints, enrollment practices, and funding disparities. Innovative solutions to these challenges are also discussed, including pseudo-governance structures, charter-district collaborations, and state laws providing charters options in how to provide special education services to students.

## KEYWORDS

charter schools; school choice; special education; students with disabilities


## Introduction

Obviously a society to which stratification into separate classes would be fatal must see to it that intellectual opportunities are accessible to all on equitable and easy terms.

– John Dewey (1916)

As systems, charter schools and special education are seemingly aligned in their intended goals: serving the unique needs of a particular subgroup of students with a tailored educational model. Yet, the two take different approaches to education in ways that often put them at odds. The concept of charter schools is grounded in autonomy, a belief that freedom from regulation will enable schools to best serve the needs of local student populations. Special education laws, in contrast, use policy and regulations to ensure compliance with hard-fought civil rights on behalf of students with special needs. President Bill Clinton famously described charter schools as “schools that have no rules,” but in reality, as public entities, charters are forced to comply with all laws governing disabled students (Garda, 2012, p. 660; Heubert, 1997). Educating students with disabilities in compliance with

**CONTACT** Katharine Parham Malhotra  [ksp2130@tc.columbia.edu](mailto:ksp2130@tc.columbia.edu)  Teachers College, Columbia University 525 West 120th Street, New York, NY 10027, USA

 Supplemental data for this article can be accessed online at <https://doi.org/10.1080/15582159.2024.2353423>.

© 2024 Taylor & Francis

federal laws may be one of the most complex challenges facing public charter schools today.

This challenge has caught the eye of philanthropists in recent years. In 2018, the Bill and Melinda Gates Foundation made four grants exceeding \$2 million related to helping charter schools address the needs of students with disabilities (Harper, 2018) and currently supports a cohort of 10 charter management organizations (CMOs) in its Charter Students with Disabilities Pilot Community Initiative (Gates Foundation, 2018). How charters may use additional funds to better address these students' needs – and how they will seek to use their autonomy and ability to innovate within the confines of state and federal regulations – remains to be seen.

This article explores the intersection of these two educational systems, discussing how their respective origins beget many of the challenges in the present era and highlighting some promising opportunities for future alignment. Sections “History of charter schools” and “History of special education” provide brief histories of each system. Section “Regulated autonomy? Tension charters face in serving students with special needs” offers a more in-depth analysis of the systemic pressures creating tension for charter schools in serving students with special needs. Section “Challenges in educating students with disabilities in charter schools” describes some of the resulting failures caused by these pressures, including enrollment discrimination against students with disabilities, legal issues stemming from efforts to retrofit laws written prior to charter schools' existence, and funding challenges. Section “Conclusion and promising future innovations” concludes with current examples of innovation and a discussion of potential directions for future policy interventions and research.

## **History of charter schools**

The concept of charter schools may be traced back two generations to Kenneth Clark, whose article “Alternative Public School Systems” published in the *Harvard Educational Review* in 1968 described the “pervasive and persistent” inefficiencies in the public school system and the need for a different form of school governance (Clark, 1968, p. 101). Though Clark never used the term “charter school,” his argument amplified the call for school choice and privatization (Abrams, 2019). Clark argued issues of increasing high school dropout rates, large numbers of special education students, and the “inefficiencies” associated with segregation could only be rectified through an infusion of competition to the system, without which public schools had no need to improve. Arguing on behalf of the high stakes for improvement, he wrote:

Even the public discussion of some of these possibilities might clear away some of the dank stagnation which seems to be suffocating urban education today . . . If we succeed in finding and developing these and better alternatives to the present educational inefficiency, we . . . will have saved our civilization through saving our cities. (p. 113)

These same educational “inefficiencies” were highlighted in *A Nation at Risk*, released by President Reagan’s National Commission on Excellence in Education in 1983. The report contributed to the growing national consensus that American public schools were failing to educate students well (Kamenetz, 2018), and it was within this reform-minded context, as well as the growing political movement toward governmental deregulation, that charter schools were born.

In 1974, Ray Budde outlined an idea for a novel contract arrangement between innovative teachers and the public school system, defining the term “charter school” for the first time (Jason, 2017). This decentralized structure, Budde argued, would give teachers a high level of autonomy over school operations in exchange for increased accountability for student achievement. Budde elaborated on this new model of education governance in his 1988 book, *Education by Charter: Restructuring School Districts*, and is widely credited with the initial concept for today’s charter school structure. The same year, Al Shanker, then-President of the American Federation for Teachers, put his weight behind the concept of charter schools in a speech at the National Press Club and a subsequent column in the *New York Times* entitled “A Charter for Change” (Reichgott Junge, 2012). For Budde and Shanker, charter schools were not to operate as alternatives to public schools but rather as innovative institutions within the public system, still employing unionized teachers but guided by alternative pedagogical strategies (Abrams, 2019; Kahlenberg, 2007).

Minnesota was the first state to pass charter school legislation and in doing so broke with Budde and Shanker in permitting school leaders to operate outside the public system. After leading the way in initiating voluntary open enrollment between districts in 1987, Minnesota authorized charter schools in 1991 (Reichgott Junge, 2012). California followed suit in 1992, and as of 2023, 45 states have enacted charter school laws (Rafa et al., 2020). Roughly 3 million out of the 50 million public school students in the United States attend one of more than 7,000 charter schools that exist today (NCES, 2022).

Since Minnesota’s law passed in 1991, state charter laws have become increasingly nuanced. In contrast to Budde’s original vision, charters today are often contracts between authorizers and nonprofit boards seeking permission to operate schools of choice. Charters set performance expectations and a timeline by which they should be met. Initial charters are typically established for a period of five years, at which point they are up for either renewal or termination by the authorizing body (ECS, 2014). The central idea is the exchange of accountability for autonomy in order to foster higher quality

education and the possibility of innovation for students who enroll by choice (Cohodes & Parham, 2021). State laws establish who is allowed to grant charters, as well as the extent to which charter schools are subject to state and local education regulations. There are important differences across states in charter school legislation, including the degree to which laws afford schools autonomy – particularly with respect to special education. These differences are discussed in greater detail in Section “Regulated autonomy? Tension charters face in serving students with special needs.”

## History of special education

References to disabled individuals are observed as early as the Greek and Roman mythologies. Prior to the 1700s, individual deviation was not tolerated, and those who differed were exiled by all facets of society: legal scholars denied them civil rights, theologians excluded them from the church, and philosophers pronounced them incapable of any form of improvement (Spaulding & Pratt, 2015; Winzer, 2012). The mid-eighteenth century was a turning point for individuals with disabilities in Europe. The broad intellectual movement of the Enlightenment stimulated new ideas and perceptions about the disabled, and the growth of special education became part of a wider movement involving the dissolution of social strata and the belief that all members of a society were equal, regardless of ability (Spaulding & Pratt, 2015). By the end of the eighteenth century, special education in Europe was considered an ingrained component of public education.

Special education’s development in America followed a different path, though it was still modestly influenced by Enlightenment teachings. Americans responded to the acceptance inherent to Enlightenment values believing something must be done for the disabled members of society, but saw the education of exceptional individuals primarily as an opportunity to bring them to the Bible and instill in them patriotic notions of duty (Winzer, 1986). These goals were remarkably similar to those espoused by proponents of the broader Common School movement in America, who sought control over an increasingly diverse populace amid concerns of social cohesion (Rebell, 2018). Horace Mann and Henry Barnard – founders of the Common School movement – were involved in the campaign to establish separate institutions to serve deaf, blind, and intellectually disabled individuals<sup>1</sup> (Winzer, 2012). Institutions were seen as a mechanism for ordering society and exerting control over the lower classes, from which many children with special needs happened to come (League, 2022). While the late 1800s saw gradual increases in general school attendance, large numbers of children with special needs remained out of school entirely (U.S. Department of Education, 2023).

Nearing the end of the nineteenth century, urbanization, industrialization, and immigration had increased, alongside public concerns about coinciding increases in crime. Scientists stepped in to offer what was thought to be empirical evidence on the role that “feeble-mindedness” played in prevailing societal issues (Winzer, 2012). More institutions were established to further segregate and sterilize those with “aberrant” behavior, under the banners of social Darwinism, eugenics, and a belief in inherited intelligence (Kaestle, 2013; Winzer, 2012). IQ testing became the norm in American education, as did a belief in fixed intelligence – the idea that no changes to a child’s environment or amount of education would affect their developmental trajectory (Kaestle, 2013). Compulsory attendance laws, first enacted in Massachusetts in 1852 and enforced in all states by 1930, were a positive step for children with disabilities who had previously been kept home entirely but also increased pressure on schools now faced with serving a new population of children with a wide array of additional needs (Kauffman & Hallahan, 2005; Yell et al., 1998). In response, schools created the in-house equivalent of institutions – segregated classrooms. This era of “hereditary determinism” continued until after WWI when the need for a more organized and skilled labor force necessitated the expansion of special education training programs, though segregated instruction remained commonplace (Winzer, 2012).

Not until the 1960s did the quality of life for those with disabilities begin to rapidly improve as federal involvement expanded and issues of discrimination were brought to the fore. *Brown vs. Board of Education*, though focused on race, set a new precedent for the important legal concept that separate education facilities were inherently unequal (Spaulding & Pratt, 2015; Yell et al., 1998). Educators began to question the value of classes segregated on the basis of having or not having a diagnosed disability, and research responded by analyzing the largely negative effects these learning environments were having on students (Spaulding & Pratt, 2015; Winzer, 2012; Wolfensberger, 1971). The 1970s saw a shift toward the abandonment of segregated, “special” classes and early moves toward the inclusion of individuals with disabilities in general education, and federal legislative support followed suit. In 1973, Congress passed the Rehabilitation Act, Section 504 of which prohibits recipients of federal funds – including public schools – from discriminating against individuals with disabilities (Angelov & Bateman, 2016; U.S. Department of Health, Education, and Welfare, 1978; Yell et al., 1998). Two years later, Congress passed the Education for All Handicapped Children Act (EAHCA), mandating that all students, regardless of ability, receive a free, appropriate public education (FAPE).

The most recent reauthorization of EAHCA passed in 2004, giving the legislation its current name: the Individuals with Disabilities Education Act (IDEA). IDEA does not prescribe one path for all children with disabilities, but rather creates a process by which the team of individuals who know

a child best determine what is appropriate for the child's education. The four basic provisions of IDEA ensure that regardless of a child's unique needs that 1) all children are entitled to an appropriate education at the public expense; 2) a continuum of alternative placements (CAP) must be available to every student with a disability; 3) every student will be educated in their least restrictive environment (LRE) – a regulation specifically targeting the segregated nature of special education's history; and 4) every student with special needs will have developed an individualized education plan (IEP) providing for their unique educational needs. To quantify the impact of the EAHCA: Prior to 1975, an estimated 4 million children with disabilities in the U.S. received no support in schools, and 1 million children with disabilities received no schooling at all (Connor & Ferri, 2007).

In 2001, the No Child Left Behind (NCLB) Act built on the framework set out in IDEA by requiring schools to report on and to be held accountable for the performance of students with disabilities on state assessments (NCLB, 2002). This additional level of accountability continued through the most recent reauthorization, the Every Student Succeeds Act (ESSA) of 2015, and solidified the high-stakes nature of accountability embedded within the web of special education regulations today.

### **Regulated autonomy? Tension charters face in serving students with special needs**

While charter schools and the education of students with special needs are both systems designed to improve the education of a specific subgroup of students, their respective historical paths have resulted in two vastly different approaches, based on distinct – and conflicting – principles. As the two systems are forced to coincide with one another, a fixed tension emerges that may not result in outcomes that are best for students – as each would otherwise intend.

Charter schools were designed to be “schools that have no rules,” as President Clinton famously described them in a 1996 presidential debate (Garda, 2012, p. 660; Heubert, 1997). The release from some of the district and state regulations placed on traditional public schools is granted in exchange for the potential that increased freedom to innovate may lead to improved student outcomes. Charters, as originally conceived, are intentionally deregulated and autonomous market-based entities grounded in the principles of freedom and flexibility. They arose in the era of accountability reform, with student outcomes – most often measured by graduation rates and performance on standardized assessments – as key indicators of success (Garda, 2012; Lange et al., 2008). Still today, most charter authorizing legislation nationwide includes provisions for charter renewal that are



tied to student performance (Peterson & Shakeel, 2023). However, unlike traditional public schools, charters' establishment is not predicated on an ability to address the wide range of needs of all possible students who may attend. In short: they can, and often do, specialize, or market themselves to a specific subset of the populace. They are, as schools of choice – and often by design, not for everyone. These foundational principles of autonomy and specialization are diametrically opposed to the principles of special education.

Special education is one of the most highly regulated components of public education in the United States, addressed by federal, state, and local laws (Miron, 2014). Special education laws were conceived in the civil rights era, with immense emphasis on process and compliance and little attention paid to student outcomes (Angelov & Bateman, 2016). Both IDEA and Section 504 were legislated long before charter schools were conceived and were written with different guiding principles in mind. Special education law presumes that public schools must be able to provide for any student who may enroll, regardless of their level of need. “Zero reject” – the idea that no public school can turn away a child based on their ability level – is one of the central tenets of federal regulation governing the operation of public schools (IDEA, 2004). These regulations force charter schools into difficult operating positions. As public entities, the requirements imposed by civil rights legislation protecting the rights of individuals with special needs cannot be waived. Charter schools, therefore, are forced to comply with a complex web of special education rules and regulations in a largely deregulated environment.

At the school and district level, the tension that results from this regulatory misalignment can result in frustration among school leaders who find special education requirements burdensome and constricting. For example, while many states waive teacher certification requirements for charter schools, allowing them autonomy within their hiring practices, this does not extend to special educators, who must still meet federal qualifications for working with students with disabilities (Bulkley & Wohlstetter, 2004). Hiring tensions are further exacerbated by national shortages of qualified special education teachers (U.S. Department of Education, 2021). Additionally, conflicting federal and state laws around teacher certification requirements leave many charter schools confused about their responsibilities (Kose, 2013). Charters in many states choose to abide by the less restrictive state laws surrounding teacher certification – due either to a lack of knowledge about federal requirements or an inability to comply as a result of labor shortages (Rhim et al., 2007).

Notably, states vary considerably in how their charter authorizing legislation addresses special education, and ultimately in the level of autonomy afforded to charters in this area. For instance, while California mandates that the school districts in which charters are located are the entities



responsible for providing special education to students at those schools, in Connecticut the responsibility falls to the district in which a student *resides*—regardless of the school where students attend (Rhim et al., 2007). Most state charter laws, however, do not directly address the relationship between charter schools and special education, opening the door for charters to grapple with local ambiguity in requirements while still maintaining compliance with federal special education regulations.

As these examples illustrate, attempts to comply with special education rules and regulations in an environment conceived to be autonomous can result in operational conflict for charter schools. The landscape of regulatory oversight and complex special education procedures necessarily limits their organizational flexibility. The following section further describes ways this conflict manifests in the present era.

## Challenges in educating students with disabilities in charter schools

### Legal issues

#### *Federal protections for students with disabilities*

Two main laws affect the education of students with disabilities: the Individuals with Disabilities Education Act of 1975 and Section 504 of the Rehabilitation Act of 1973. These laws apply to all public schools in the United States that accept any form of federal financial assistance, including charter schools, and each were grounded in the civil rights principles established by *Brown vs. Board of Education* (Bulkley & Wohlstetter, 2004). These laws have fundamentally changed the way students with special needs are educated in this country, and are the root of much of the tension that charter schools face in appropriately serving students with disabilities, as both were passed prior to charters' existence.

Prior to the passage of IDEA in 1975, it was legal to prevent students with disabilities from attending public schools. The law today includes seven core components, outlined in [Table 1](#), each of which were developed in response to the history of denying education to children with

**Table 1.** Accountability components in IDEA.

1	Public schools are not allowed to reject any student (a “zero reject” policy).
2	Students suspected of having a disability are guaranteed a nondiscriminatory evaluation by a licensed professional at the school’s expense.
3	All students with special needs are guaranteed access to a free, appropriate public education (FAPE).
4	Students with disabilities must each have developed an individualized education plan (IEP).
5	Students with disabilities must be served in their least restrictive environment (LRE).
6	Parents have a right to participate in the education of their children with special needs, including the development of the IEP.
7	Parents have a right to dispute resolution and due process if they are unhappy with the plan put in place for their child.

Source: IDEA (2004).

**Table 2.** Students served under IDEA.

Disability Category	Percentage of Students with Disabilities
Specific Learning Disability	33%
Speech or Language Impairment	19%
Other Health Impairment	15%
Autism	12%
Developmental Delay	7%
Intellectual Disability	6%
Emotional Disturbance	5%
Multiple Disabilities	2%
Hearing Impairment	1%
Orthopedic Impairment	1%
Visual Impairment	<0.5%
Traumatic Brain Injury	<0.5%

*Source:* National Center for Education Statistics (2022).

disabilities in the U.S. and concerns about protecting students' civil rights. IDEA today provides for the protection of 13 categories of disabilities: specific learning disability, other health impairment, autism, emotional disturbance, speech or language impairment, visual impairment, deafness, hearing impairment, deaf-blindness, orthopedic impairment, intellectual disability, traumatic brain injury, and multiple disabilities (IDEA, 2004). Table 2 highlights the distribution of students served in public schools, including charter schools, under IDEA within each of these federally defined categories.

The responsibility for identifying and evaluating children who may have a disability rests with state and local education agencies, through a process known as "child find" (IDEA, 2004). The "child find" provision of the law mandates that all public schools evaluate students demonstrating potential signs of disabilities. For students who attend public schools and who are not referred for special education through an external medical professional, there is a formalized referral process for special education services. State and local education agencies bear both the responsibility and cost for the referral process, as well as the provision of any services deemed as required for students qualifying for an IEP under IDEA.

While IDEA is the main federal law regulating the education of students with disabilities, Section 504 adds additional civil rights protections. Originally written as a component of the Rehabilitation Act in 1973, the statute was subsumed under the Americans with Disabilities Act in 1990. Section 504 is an anti-discrimination statute applicable to students with disabilities under which students are eligible for accommodations even if they are not formally diagnosed as having a disability or do not have an IEP. The statute is a civil rights mandate that offers protection to individuals with disabilities the same way that other civil rights laws offer protection against discrimination on the basis of race or gender. The civil rights of all IDEA students are protected under Section 504, but not all Section 504 students may be protected under IDEA (U.S. Department of Education, 2018). In providing public education to

students with disabilities, charter schools are required to comply with regulations under each of these federal laws.

### *Violations of federal protections*

Since the creation of charter schools in the early 1990s, there have been several examples of schools or districts violating students' civil rights under the aforementioned laws. In 2010, the Southern Poverty Law Center filed a class action lawsuit against the Louisiana Department of Education over New Orleans charter schools' treatment of students with disabilities (Southern Poverty Law Center, 2010). The plaintiffs included a blind fourth-grade student whose mother attended school with him daily because no staff member was assigned to help him move through the hallways, and a fourth-grade student with emotional disturbance who was kept full-time in an "isolation" room with no teacher (Chang, 2010). The case was settled in 2015, and the city of New Orleans put in place several reforms to protect against future discrimination, including: adopting a centralized expulsion system to provide oversight over individual schools' decisions to remove students; a citywide enrollment system known as the OneApp, which gives all students a nearly equal chance of enrolling in the school of their choice; and, independent monitors contracted every quarter to report on how a sample of New Orleans' charter schools are complying with IDEA (Lurye, 2018).

The Department of Education's Office of Civil Rights (OCR) has also received numerous complaints stemming from charters' treatment of students with special needs in the past three decades. A 2014 complaint against a Texas CMO alleged underrepresentation of students with disabilities compared to traditional public schools (OCR, 2014). A 2016 complaint by a group of New York City parents alleged a CMO had failed to identify students as eligible for special education or to provide appropriate accommodations (OCR, 2016). And, a 2021 complaint filed by advocates in Colorado alleged that the presence of questions on charter school applications about whether prospective students already receive special education services is a violation of federal law (Meltzer, 2021).

### *Charters' legal status*

Charters' legal status plays a key role in understanding their ability to comply with federal regulations and to adequately provide services for students with special needs. Federal special education laws delegate implementation responsibilities to state education agencies (SEAs), which then pass the responsibility along to local education agencies (LEAs) – entities which have historically centralized special education processes at the district level for all schools under their administration. The creation of charter schools, however, introduced a twist to the concept of an LEA – a single school carrying the same legal status as a full district (Bulkley &

Wohlstetter, 2004). This legal structure is appealing to charter schools as it grants them the greatest operational flexibility. Independent charter schools (those operating as their own LEA, as opposed to those under the umbrella of a charter network or CMO – entities which function more similarly to a traditional district in overseeing and supporting a subset of schools) have the freedom – and responsibility – in designing their chosen curriculum, over hiring practices, and in the overall design of the school’s daily operations. However, without the economies of scale that a traditional district structure provides, it is more challenging for independent charters to provide for students with a wide array of disabilities or for students with profound special needs (Bulkley & Wohlstetter, 2004).

There exist today both independent charter schools as well as charters that operate within traditional LEA structures. The LEA status of charter schools, whether independent or part of an existing LEA, has ramifications for how this unique subset of public schools operates and is funded to serve students with disabilities. Independent charter schools, for the most part, receive state and federal funds directly and may manage all funds as they see fit, but are wholly responsible for the provision of special education for any students who may attend – regardless of their level of need. Alternatively, charter schools operating as part of an existing LEA, or sometimes a CMO, have access to centralized services to assist with special education provision, which can be useful in providing more expensive services for students with severe needs. Independent charters are therefore more likely to struggle with the provision of special education – particularly for high-needs students – than charters that are a part of a traditional school district or part of a CMO. However, charters under a larger LEA or CMO umbrella must trade off some autonomy for this arrangement. These charter schools can take advantage of large contracts with service providers, district transportation services, and legal counsel, but also must adopt the district or organization’s approach to educating students with disabilities, regardless of how well that approach aligns with the individual charter school’s stated mission. There also exists a third type of charter, often known as “partial link” charter schools, which may or may not be legally part of an existing LEA but which share the responsibility for the provision of special education with the local agency.

The legal status of charter schools is also critically linked to their financial independence. Fully independent charter schools, legally responsible for the provision of all special education for students, may need to contract with outside vendors to provide certain specialized services, such as occupational therapy or speech and language services. While these services are often centralized at the district level, the same contracted services can be proportionately more expensive for single-site operations which may not need them full-time – a particular challenge for small schools with finite resources. A study from 2013 found that charters’ LEA status was a significant factor in

determining the amount of funding charters need to succeed, as the education of students with special needs can cost more than twice as much as the education of students in general education (ECS, 2015; Kose, 2013). Research has also found that one child with a severe disability has the potential to bankrupt a small charter school (Miron & Nelson, 2000).

A lack of clarity in state laws regarding charters' legal status and how special education is overseen in charter schools presents additional complexity. Some states assign special education responsibility based on charter schools' legal status, some states assign based on who authorizes the school, and some states define all charter schools as independent LEAs *except for* the provision of special education, which is instead overseen by the district (Rhim et al., 2007). This lack of consistency is most likely the result of state attempts to retrofit existing laws following the creation of charter schools, and to evolve in keeping with the pace of charters' development. Early in charter schools' history, the federal government recognized this potential source of confusion. A GAO report from 1995 recommended the federal government clarify for all states who is ultimately responsible for educating students with disabilities in charter schools (U.S. General Accounting Office, 1995). This clarification has never been made, and case law regarding charter school responsibilities toward the administration of special education is still evolving.

Some scholars have asserted that IDEA should be amended to prohibit any charter schools from operating as independent education agencies, given the limitations and challenges they face in adequately serving students with special needs. Congress foresaw these issues in its original passage of IDEA (then the EAHCA), though charter schools had yet to come into existence. EAHCA authors believed that small LEAs would struggle to fulfill the Act's mandates, and precluded states from distributing federal funds to small LEAs eligible to receive less than \$7,500, as prescribed by the EAHCA funding formula (Garda, 2012). These small education agencies could only receive funding under EAHCA by filing applications along with other small agencies to create programs "of sufficient size and scope" to meet the needs of children with disabilities (Garda, 2012). These policy rationales were lost during the 1997 reauthorization of IDEA – the first iteration of the law to account for charter schools – removing the prohibition on funding small LEAs and permitting charter schools to exist as independent agencies (Garda, 2012). These post-1997 provisions still exist today.

### ***Enrollment discrimination***

Charter schools now serve more than 3 million students nationwide in more than 7,000 institutions (NCES, 2022). While in theory students with special needs would be equally distributed across traditional public schools and charter schools due to federal requirements to offer open enrollment in all

public schools, there has historically been a gap between the proportion of students with disabilities attending the two types of schools, with charters enrolling on average two percentage points fewer annually (Miron, 2014). Charter advocates argue they do not have the capacity to identify, evaluate, and serve students with disabilities, particularly those with severe special needs, while charter critics point to issues of systemic and illegal discrimination against this population of students (Angelov & Bateman, 2016; Lacireno-Paquet et al., 2002).

Though questions about charters' enrollment discrimination have persisted since their establishment, there is little consensus on the prevalence of the issue. Charter discrimination against students with disabilities was the subject of a Congressional hearing in 2010 and a subsequent Government Accountability Office (GAO) report in 2012. The GAO conducted a nationwide analysis of enrollment data, spurred by public concerns about disproportionate enrollment rates of students with special needs between charters and traditional public schools. The report concluded that in the 2008–09 school year a 3.6% point gap existed between the two types of schools, and that most charter schools surveyed faced operational and financial challenges in serving students with severe disabilities (GAO, 2012). A report from the Manhattan Institute the following year assessed charter schools in New York City and found that the enrollment gap primarily existed because students with disabilities were less likely to apply to charter schools in kindergarten, and that the observed gap in enrollment rates simply grows progressively for students between kindergarten and third grade (Winters, 2013).

More recent analyses have found that while the average enrollment gap across school types has decreased slightly since the GAO's report from the 2008–09 school year, it has sustained. A review of information from the Civil Rights Data Collection from 2015–16 shows that approximately 10.8% of charter school students have special needs, compared to 12.8% of students in traditional public schools (Lancet et al., 2020). There are several theories about why this gap persists. Systemic issues such as differential funding, limited charter capacity, transportation issues, and parental knowledge gaps may each play a role (Angelov & Bateman, 2016). However, there also exists evidence of charters' discriminatory practices, such as “cropping off” service to students whose disabilities make them among the costliest to educate, counseling out students with severe needs, or advising families of students with disabilities not to apply (Bergman & McFarlin, 2020; Fiore et al., 2000; Lacireno-Paquet et al., 2002).

Additional evidence suggests the observable gap in enrollment rates of students with disabilities between charters and traditional public schools may have less to do with discrimination at the point of enrollment and more to do with student classification or identification as having special needs once enrolled. The same Manhattan Institute report that highlighted

the gap in New York City's school system also noted that 80% of the observed growth in the enrollment gap as students age is due to charters' decreased likelihood of identifying students with disabilities initially, and their increased likelihood of declassifying students who may enroll already having an IEP (Setren, 2019; Winters, 2013). Recent evidence in support of this hypothesis has come from the Denver public school system. In 2017, Winters found that attending a Denver charter school reduces the likelihood that a student is classified as having a specific learning disability (Winters et al., 2017) – the largest and most subjectively diagnosed of the 13 federally defined disability categories (Sullivan & Bal, 2013). Further, Winters found no evidence that attending a charter school reduces the probability of a student's being classified as having a speech or language disorder or autism (Winters et al., 2017) – two of the more objectively defined disabilities (Sullivan & Bal, 2013).

In an effort to proactively enforce equitable enrollment policies, some cities have adopted unique, non-regulatory practices. In 2012, the District of Columbia (DC) Public Charter School Board (PCSB) created a “mystery shopper” program to ensure charter schools were not turning away students with disabilities (O'Donnell, 2015). The program entails DC PCSB staff members and volunteers calling charter schools pretending to be parents seeking to enroll a child with special needs and tracking how inquiries are received by charters within the District. Schools were notified of the program before it began, and since its inception the number of schools giving parents improper responses has fallen. Additionally, DC annually publishes data about special education students' enrollment and performance at each public school in citywide equity reports. Inspired by DC's success, the Massachusetts Department of Elementary and Secondary Education created a similar “mystery shopper” program in 2013 (NCSECS, 2016).

### **Funding**

When Congress passed the Education for All Handicapped Children Act in 1975 it was not just creating a more equitable framework for the education of children with special needs, but was also imposing upon states a series of regulations that would result in additional costs. At the time of its writing, it was estimated that special education would cost twice as much as general education, and Congress promised that 40% of the excess costs of educating children with disabilities in public schools – a metric measured by the national average per-pupil expenditure – would be borne by the federal government (Angelov & Bateman, 2016). The actual level of federal funding provided to states has never approached this amount. In FY2019, federal assistance covered 14.3% of the cost of educating students with disabilities, leaving the remaining costs to be absorbed by states and localities (CRS,



2019). The provision of special education has the potential to drain an LEA's resources – particularly those of an independent charter school – through required testing, evaluation, and the provision of necessary services (Bordelon, 2010). Court decisions since the early 1990s have made clear that a lack of funding is not a sufficient excuse for schools failing to provide for students with special needs under federal law (Angelov & Bateman, 2016).

Charter schools receive funding for special education through a combination of federal, state, and local district formulas and policies – some of which have been retrofitted to account for the existence of independent charter schools, and some which have not. On average, charter schools operate with less funding than traditional public schools because of their limited access to money raised through local property tax increases (Rhim et al., 2015). A study from the University of Arkansas found that among the states with the largest populations of charter schools, charters received 28% less in per-pupil expenditures, on average, than traditional public schools, due primarily to differences in access to local funds (Wolf et al., 2017). This discrepancy amounts to a significant challenge for charter schools. Approximately 46% of all dollars allocated to support special education come from localities, while roughly 45% of special education funding comes through state per-pupil allocations through annual budgetary processes (Rhim et al., 2015). There are a variety of state-level funding schemes for distributing special education funding, including: weighted funding, census-based distributions, resource-based funding, percentage reimbursements, block grants, or various combinations of these funding mechanisms (ECS, 2015), and research has not yet established which may be most efficient in terms of covering costs associated with the provision of special education.

Federal funds make up the remaining percentage of financial support for special education and are distributed through IDEA grants as well as Medicaid reimbursements. Federal funds through Part B of IDEA are distributed to states and localities to support the general education of students with special needs, while funds through Part C are allocated toward early intervention services for infants and toddlers. Funds are given to states based on the number of students with disabilities in the state times the average per-pupil expenditure nationwide (CRS, 2019). This structure can result in disproportionately higher funding to small states and states with fewer students, limiting funding for states and districts with the greatest needs. To qualify for Medicaid reimbursements, students must have an IEP filed with the state, and districts – as well as charters who legally operate as school districts – must be validated by the federal government as eligible providers of services (Rhim et al., 2015). This process is particularly burdensome for small districts and independent charter schools who have limited human resource capacity but a great need for additional financial assistance.

Some charter schools and CMOs seek out additional funding from private sources to supplement their limited government funding. For instance, the Noble Minds Institute for Whole Child Learning is a charter school in New Orleans founded in 2017 serving a high number of special needs students (Noble Minds, 2017). The school's curriculum focuses on socio-emotional learning and employs its own clinical director and in-house therapeutic programs (Lurye, 2018). These nonstandard resources cost money, and so far, have come from external sources, including a start-up donation from the Walton Family Foundation for \$325,000 and an additional grant from the Institute for Mental Hygiene (Lurye, 2018). With a staff of just 11 full-time employees, Noble Minds staffers are each responsible for multiple jobs in order to limit the school's operational budget. As an independent charter, the biggest challenge the school will face in the coming years is translating these fixed costs into an operating budget that can endure despite the uncertainty that comes with relying on external resources, as many independent charters must in their early years. In 2018, lower than expected enrollment at Noble Minds forced budget cuts resulting in reductions in full-time staff hours (Jewson, 2018). How the school finds its way through the field of high-stakes student recruitment in a city that is nearly 100% open-enrollment charter schools will determine its ultimate survival.

### **Conclusion and promising future innovations**

The passage of landmark civil rights legislation in the 1970s set a new course for the education of students with special needs in the U.S. After a long history of discrimination, all public schools were required to serve any student who walked through the door, regardless of their level of ability or need. In the years since these laws were passed, a new form of chartered public schooling took shape, changing the landscape of public education and presenting new challenges for compliance with federal civil rights legislation. This article has provided an overview of some of these challenges, beginning with a discussion of the fundamental tension of regulation versus autonomy that charter schools face in addressing students' special needs, and stemming from the historical differences in each system's development. Other charter school challenges include: developing economies of scale at independent schools; a lack of clarity around legal responsibilities in educating students with disabilities; funding discrepancies between charter schools and traditional public schools; and, issues of enrollment discrimination. As the charter school sector continues to evolve, so, too, should legislation governing charter schools' special education responsibilities, as well as research into best practices, efficient funding structures, and charter-district administrative arrangements.

In recent years, a surge of innovative pseudo-governance structures have developed to assist charter schools in addressing their special

education responsibilities. In Boston in 2011, for example, traditional district schools along with charter and Catholic schools formed a compact to provide collective professional development on special education practices (Rhim et al., 2016). New York City developed a Special Education Collaborative that charter schools can elect to join as a means of accessing resources, training, and other support services, and utilizes a tiered membership structure to allow charter schools to tailor their involvement based on specific needs and budgets – allowing for critical distinctions between independent and network charters (NCSECS, 2017). And, in Colorado, all charters are mandated to be part of an existing LEA, but the state allows charters to choose from a spectrum of options for how independent they would like to be in terms of special education provision. Schools can choose to leave all special education service provision to the district, to provide select services themselves while relying on the district to provide the remainder, or to fully provide all special education themselves (Rhim et al., 2016). This is perhaps the most innovative current example of states maneuvering thoughtfully through the complex web of existing special education regulations and the tension charters face between desired autonomy and their need for support.

Lastly, there are notable opportunities for charter schools to take *advantage* of their additional autonomy in ways that could be to the benefit of special education students. For instance, research continues to highlight the benefits of inclusive special education for students with and without disabilities (Levenson, 2020; Malhotra, 2024). Charters are in the unique position to leverage the flexibility to which they are afforded in areas such as class and student scheduling to better promote equitable time spent in general education for this subpopulation of students. This type of untapped opportunity should be considered alongside the previous innovations and policies as reforms to the provision of special education in charter schools continue to evolve.

## Note

1. The term “mental retardation” was used to describe individuals with severe cognitive impairments until very recently and was the common terminology in the mid-1800s. Not until October 2010 did Congress pass legislation officially changing the term “mental retardation” to “intellectual disability” in all places where it was used (Rosa’s Law, 2010). In this article, I use the term “intellectual disability” unless directly referencing historical materials that use “mental retardation” due to the pejorative association with the term.

## Acknowledgments

This previously appeared as Working Paper 242 with the National Center for the Study of Privatization in Education at Teachers College, Columbia University (<http://ncspe.tc.columbia.edu/working-papers>).

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## ORCID

Katharine Parham Malhotra  <http://orcid.org/0009-0000-1723-9446>

## References

- Abrams, S. E. (2019). Exit, voice, and charter schools. *La Revista Juridica de la Universidad de Puerto Rico*, 88(3), 895–919.
- Angelov, A. D. S., & Bateman, D. (2016). *Charting the course: Special education in charter schools*. Council for Exceptional Children.
- Anti-Defamation League. (2022). “A brief history of the disability rights movement.” *Anti-Defamation League: Anti-Bias Education*. <https://www.adl.org/education/resources/back-grounders/disability-rights-movement>
- Bergman, P., & McFarlin, I. (2020). Education for all? A nationwide audit study of schools of choice. *IZA DP No. 13007*. <https://www.iza.org/publications/dp/13007/education-for-all-a-nationwide-audit-study-of-school-choice>
- Bordelon, S. J. (2010). Making the grade: A report card on special education, New Orleans charter schools, and the Louisiana charter schools law. *Loyola Journal of Public Interest Law*, 11(2), 441–468.
- Bulkley, K. E., & Wohlstetter, P. (Eds.). (2004). *Taking account of charter schools: What’s happened and what’s next?* Teachers College Press.
- Chang, C. (2010). “New Orleans special needs students file federal lawsuit against Louisiana department of education.” *The Times-Picayune*. [https://www.nola.com/news/education/new-orleans-special-needs-students-file-federal-lawsuit-against-louisiana-department-of-education/article\\_a3473e30-95bf-502a-9bed-97d5c548d051.html](https://www.nola.com/news/education/new-orleans-special-needs-students-file-federal-lawsuit-against-louisiana-department-of-education/article_a3473e30-95bf-502a-9bed-97d5c548d051.html)
- Clark, K. (1968). Alternative public school systems. *Harvard Educational Review*, 38(1), 100–113. <https://doi.org/10.17763/haer.38.1.vj454v36776725q7>
- Cohodes, S., & Parham, K. (2021). Charter schools’ effectiveness, mechanisms, and competitive influence. *Oxford Research Encyclopedia of Economics and Finance*. <https://doi.org/10.1093/acrefore/9780190625979.013.648>
- Congressional Research Service (CRS). (2019). *The Individuals with Disabilities Education Act (IDEA), Part B: Key Statutory and Regulatory Provisions*, R41833. <https://crsreports.congress.gov/product/pdf/R/R41833>
- Connor, D. J., & Ferri, B. A. (2007). The conflict within: Resistance to inclusion and other paradoxes in special education. *Disability & Society*, 22(1), 63–77. <https://doi.org/10.1080/09687590601056717>
- Education Commission of the States. (2014). “Charter schools: Does the state have a charter school law?” 50-State Comparison. Education Commission of the States.

- Education Commission of the States. (2015). "State funding for students with disabilities: All states all data." 50-State Comparison. Education Commission of the States.
- Fiore, T. A., Harwell, L. M., Blackorby, J., & Finnigan, K. S. (2000). *Charter schools and students with disabilities: A national study*. Westat. Prepared for the Office of Educational Research and Improvement, U.S. Department of Education.
- Garda, R. A. (2012). Culture clash: Special education in charter schools. *North Carolina Law Review*, 90(3), 655–718.
- Gates Foundation. (2018). "Our work in public charter schools - Fact Sheet." <https://usprogram.gatesfoundation.org/-/media/usp/usp-resources/k12-resources/charter-overview-collateral.pdf>
- Harper, A. (2018, September 13). "Gates foundation directs funding toward special ed in charter schools." *Education Dive*. <https://www.educationdive.com/news/gates-foundation-directs-funding-toward-special-ed-in-charter-schools/532264/>
- Heubert, J. P. (1997). Schools without rules? Charter schools, federal disability law, and the paradoxes of deregulation. In *Harvard Civil Rights-Civil Liberties Law Review* (2nd ed., Vol. 32, p. 301). Harvard College.
- Individuals with Disabilities Education Act, 20 U.S.C §1400. (2004).
- Jason, Z. (2017). "The battle over charter schools." *Ed. Magazine* - Harvard Graduate School of Education. <https://www.gse.harvard.edu/ideas/ed-magazine/17/05/battle-over-charter-schools>
- Jewson, M. (2018, September 20). "Two schools with high numbers of special education students face budget cuts." *The Lens*. <https://thelensnola.org/2018/09/20/two-schools-with-high-numbers-of-special-education-students-face-budget-cuts/>
- Kaestle, C. (2013). *Testing policy in the United States: A historical perspective*. Educational Testing Service. [https://www.ets.org/Media/Research/pdf/kaestle\\_testing\\_policy\\_us\\_historical\\_perspective.pdf](https://www.ets.org/Media/Research/pdf/kaestle_testing_policy_us_historical_perspective.pdf)
- Kahlenberg, R. D. (2007). *Tough liberal: Albert Shanker and the battles over schools, unions, race, and democracy*. Columbia University Press.
- Kamenetz, A. (2018, April). "What 'A Nation At Risk' got wrong, and right, about U.S. schools." *nprEd*. <https://www.npr.org/sections/ed/2018/04/29/604986823/what-a-nation-at-risk-got-wrong-and-right-about-u-s-schools>
- Kauffman, J. M., & Hallahan, D. P. (2005). *Special education: What it is and why we need it*. Pearson/Allyn and Bacon.
- Kose, L. K. (2013). Challenges of charter schools with special education: Issues of concern for charter school authorizers and service providers. *Mid-Atlantic Education Review*, 1(1), 36–45.
- Lacireno-Paquet, N., Holyoke, T. T., Moser, M., & Henig, J. R. (2002). Creaming versus cropping: Charter school enrollment practices in response to market incentives. *Educational Evaluation and Policy Analysis*, 24(2), 145–158. <https://doi.org/10.3102/01623737024002145>
- Lancet, S., Rhim, L. M., & O'Neill, P. (2020). *Enrollment of students with disabilities in charter schools and traditional public schools*. National Center for Special Education in Charter Schools. <https://www.centerforlearnerequity.org/wp-content/uploads/Enrollment-of-Students-with-Disabilities-in-Charter-Schools-and-Traditional-Public-Schools.pdf>
- Lange, C. M., Rhim, L. M., & Ahearn, E. M. (2008). Special education in charter schools: The view from state education agencies. *Journal of Special Education Leadership*, 21(1), 12–21.
- Levenson, N. (2020). *Six shifts to improve special education and other interventions: A commonsense approach for school leaders*. Harvard Education Press.

- Lurye, S. (2018). "Can charter schools afford to welcome students in special education?" *Disability Scoop*. <https://www.disabilityscoop.com/2018/09/14/can-charter-schools-afford-sped/25493/>
- Malhotra, K. P. (2024). Whose IDEA is this? An examination of the effectiveness of inclusive education. *Educational Evaluation and Policy Analysis*. [Forthcoming].
- Meltzer, E. (2021). "Special ed questions on charter school apps violate federal law, complaints allege." *Chalkbeat: Colorado*. <https://www.chalkbeat.org/colorado/2021/10/5/22711758/colorado-charter-schools-discrimination-complaint-students-disabilities/>
- Miron, G. (2014). "Charters should be expected to serve all kinds of students." *EducationNext*. <https://www.educationnext.org/charters-expected-serve-kinds-students/>
- Miron, G., & Nelson, C. (2000). *Autonomy in exchange for accountability: An initial study of Pennsylvania charter schools*. The Evaluation Center, Western Michigan University.
- National Center for Education Statistics (NCES). (2022). *Public Charter School Enrollment. Condition of Education*. U.S. Department of Education, Institute of Education Sciences.
- National Center for Special Education in Charter Schools (NCSECS). (2016, October). *Promising practices: All welcome to apply? 'Mystery parent' initiative found to be cost effective diagnostic tool for charter authorizers concerned about equity*. <https://www.ncsecs.org/report/promising-practices-mystery-parent/>
- National Center for Special Education in Charter Schools (NCSECS). (2017, March). "Equity Coalition Issue Brief"—Infrastructure." <https://www.ncsecs.org/brief/equity-coalition-issue-brief-special-education-infrastructures/>
- Noble Minds. (2017). "Noble Minds—About." <https://nobleminds.org/about/>
- No Child Left Behind Act (NCLB). (2002). Pub. L. No. 107-110, § 101, Stat. 1425.
- O'Donnell, P. (2015, March 13). "Debating the special education challenge in charter schools." Education Writers Association. <https://www.ewa.org/blog-educated-reporter/debating-special-education-challenge-charter-schools>
- Office for Civil Rights. (2014). *Re: OCR docket No. 06-11-5004*. U.S. Department of Education. Press Release. <https://www2.ed.gov/documents/press-releases/harmony-public-schools-letter.pdf>
- Office for Civil Rights. (2016). *Complaints against Success Academy Charter Schools, Inc.* [http://rishawnbiddle.org/outsidereports/ocr\\_complaint\\_against\\_success\\_academy.pdf](http://rishawnbiddle.org/outsidereports/ocr_complaint_against_success_academy.pdf)
- Peterson, P. E., & Shakeel, M. D. (2023). The nation's charter report card: A new ranking of states by charter student performance. *Journal of School Choice*, 18(1), 30–66. <https://doi.org/10.1080/15582159.2023.2273607>
- Rafa, A., Erwin, B., Kelly, B., & Wixom, M. A. (2020). "Charter school policies." 50-State Comparison. Education Commission of the States.
- Rebell, M. A. (2018). Civic participation and the federal courts. In *Flunking democracy: Schools, courts, and civic participation* (pp. 34–49). University of Chicago Press.
- Reichgott Junge, E. (2012). *Zero chance of passage: The pioneering charter school story*. Beaver's Pond Press.
- Rhim, L. M., Ahearn, E. M., & Lange, C. M. (2007). Charter school statutes and special education: Policy answers or policy ambiguity. *The Journal of Special Education*, 41(1), 50–63. <https://doi.org/10.1177/00224669070410010401>
- Rhim, L. M., O'Neill, P., Ruck, A., Huber, K., & Tuchman, S. (2015, November). *Getting lost while trying to follow the money: Special education finance in charter schools*. National Center for Special Education in Charter Schools.
- Rhim, L. M., Sutter, J., & Campbell, N. (2016). *Improving outcomes for students with disabilities: Negotiating common ground for district and charter school collaboration*. Center for American Progress.



- Rosa's Law, Pub. L. No. 111-256.(2010). <https://www.govinfo.gov/app/details/PLAW-111publ256>
- Setren, E. (2019). Targeted vs. general education investments: Evidence from special education and English language learners in Boston charter schools. *The Journal of Human Resources*, 58(4), 1073–1112. <https://doi.org/10.3368/jhr.56.4.0219-10040R2>
- Southern Poverty Law Center. (2010, July 28). “Children with disabilities face discrimination in New Orleans schools.” Press Release. <https://www.splcenter.org/news/2010/07/28/children-disabilities-face-discrimination-new-orleans-schools>
- Spaulding, L. S., & Pratt, S. M. (2015). A review and analysis of the history of special education and disability advocacy in the United States. *American Educational History Journal*, 42(1), 91–109.
- Sullivan, A. L., & Bal, A. (2013). Disproportionality in special education: Effects of individual and school variables on disability risk. *Council for Exceptional Children*, 79(4), 475–494. <https://doi.org/10.1177/001440291307900406>
- U.S. Department of Education. (2018). *The civil rights of students with hidden disabilities under Section 504 of the Rehabilitation Act of 1973*. U.S. Department of Education, Office of Civil Rights.
- U.S. Department of Education. (2023). *A istory of the Individuals with Disabilities Education Act*. U.S. Department of Education, Individuals with Disabilities Education Act.
- U.S. Department of Education, Office of Postsecondary Education. (2021). *Preparing and Credentialing the Nation's Teachers: The Secretary's 11th Report on the Teacher Workforce*. [https://title2.ed.gov/Public/Title\\_II\\_Secretary's\\_Report\\_508.pdf](https://title2.ed.gov/Public/Title_II_Secretary's_Report_508.pdf)
- U.S. Department of Health, Education, and Welfare. (1978). “Section 504 of the Rehabilitation Act of 1973 – Fact Sheet: Handicapped Persons Rights under Federal Law.” Office of the Secretary, Office for Civil Rights.
- U.S. General Accounting Office. (1995). *Charter schools: New models for public schools provide opportunities and challenges*. U.S. General Accounting Office.
- U.S. Government Accountability Office. (2012). *Charter schools: Additional federal attention needed to help protect access for students with disabilities*. U.S. Government Accountability Office. Publication No. GAO-12-543.
- Winters, M. A. (2013). *Why the gap? Special education and New York City charter schools*. Manhattan Institute. <https://www.manhattan-institute.org/html/why-gap-special-education-and-new-york-city-charter-schools-5862.html>
- Winters, M. A., Carpenter, D. M., & Clayton, G. (2017). Does attending a charter school reduce the likelihood of being placed into special education? Evidence from Denver, Colorado. *Educational Evaluation and Policy Analysis*, 39(3), 448–463. <https://doi.org/10.3102/0162373717690830>
- Winzer, M. A. (1986). Early developments in special education: Some aspects of enlightenment thought. *Remedial and Special Education*, 7(5), 42–49. <https://doi.org/10.1177/074193258600700509>
- Winzer, M. A. (2012). *History of special education: From isolation to integration*. Gallaudet University Press.
- Wolfensberger, W. (1971). Will there always be an institution? II: The impact of new service models. *Mental Retardation*, 9(6), 30–38.
- Wolf, P. J., Maloney, L. D., May, J. F., & DeAngelis, C. A. (2017, May). *Charter school funding: Inequity in the city*. University of Arkansas, Department of Education Reform. <http://www.uaedreform.org/downloads/2017/05/inequity-in-the-city.pdf>
- Yell, L., Rogers, D., & Rogers, E. L. (1998). The legal history of special education: What a long, strange trip it's been! *Remedial and Special Education*, 19(4), 219–228. <https://doi.org/10.1177/074193259801900405>