The Research Alliance for New York City Schools

Special Education in New York City:
Understanding the Landscape

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Introduction

Nearly one in five New York City public school children is diagnosed with a disability, making them eligible to receive special education services. These students are diverse in terms of their skills, abilities, and background characteristics. Historically, students with disabilities have had less access to learning opportunities and lower academic outcomes than their general education peers. Furthermore, disabilities frequently overlap with other vulnerabilities. Some groups of students—including boys, students of color, and those living in poverty—are overrepresented in special education, both locally and nationally.

Understanding who students with disabilities are and where they are being served is a first step toward improving their educational experiences and outcomes. In this brief, we present a snapshot of the landscape of special education in New York City, exploring the background characteristics of students with disabilities, the settings in which they are served, and their engagement with school as indicated by attendance and suspension rates. We focus on variation associated with race and ethnicity, poverty, and gender, as well as placement in special classrooms that are segregated from general education students. The brief highlights patterns we believe are most salient because they point to problems that may be addressed through policy or practice, successes that can be built on, or areas where we need to gather more information about the causes and consequences of disparities. We hope this work provides a useful starting point for conversation and the development of new lines of research.

The National Policy Context

The historic passage of Public Law 94-142 in 1975 guaranteed children with disabilities the right to a "free and appropriate public education" through an Individualized Education Program (IEP), a specially designed plan to meet students' unique needs and circumstances. This law transformed the landscape of public education for students with disabilities—affecting millions of school-aged children who were previously excluded from public schools or received only limited services (US Department of Education, 2010).

In the over forty years since this law was enacted, additional legislation and regulations continued to transform the landscape, with growing attention to issues of access and equity. Most notably, the Individuals with Disabilities Education Act (IDEA) of 1990 mandated that schools serve students with disabilities in what is referred to as the "least restrictive environment." This means students must have the opportunity to participate in general education settings with non-disabled peers for as much of the day as possible. This policy is supported by some research that shows better social, emotional, and academic outcomes for students who are

served in inclusive settings, as well as the more general principle that segregating disabled students is illegal, inherently unequal, and detrimental to students (Hehir et. al., 2016; NCD, 2018). The Research Alliance's own internal analyses also support the benefits of serving students in inclusive environments.

The IDEA legislation requires states to monitor and address racial/ethnic disproportionality in special education in terms of classification, school discipline (e.g., suspension rates), and placement in segregated special education classrooms. This stems from longstanding patterns of overrepresentation of students of color in special education generally, and within certain disability types. Students with disabilities are also more likely to be suspended than their general education peers, with Black and Latino students with disabilities experiencing the highest suspension rates. Finally, students of color and students with certain disability types (such as autism, emotional disturbance, and intellectual disabilities) are more likely to be served in a segregated setting (Office of Special Education and Rehabilitative Services, 2018).

There is intense debate about whether students of color are overrepresented in special education because they are inappropriately identified, or because they are actually more likely to have disabilities (due to risk factors such as poverty)—with some arguing that students of color are in fact *under-diagnosed* and missing out on necessary services. Recent research has provided evidence in support of both sides of the argument (see, for example, Donovan & Cross, 2002; Elder, et. al., 2019; Fish, 2019; Morgan et. el., 2015; Skiba, et. al., 2016). It is possible that some schools are prone to over-identification, while others are prone to under-identification.

New York City Policy Context

Equity and inclusion for all students have recently become a more central focus of NYC's education policy conversation. In late 2018, for example, drawing from his citywide listening tour, the NYC Schools Chancellor highlighted the need to improve the way we educate students with disabilities and increase the number of students served in the least restrictive environment. He further emphasized a vision for school climate where "all students, regardless of ability, feel welcome, included, and valued" in school.

This is generally in line with the goals of initiatives that were already in place, including the NYC Department of Education's Shared Path to Success initiative, which was launched in 2010. This multi-phase effort aims to increase disabled students' access to "high-quality, challenging instruction that will prepare them to reach their greatest potential." Specifically, the Shared Path to Success initiative strives to:

- Close the achievement gap between students with disabilities and their peers without disabilities;

- Provide students with disabilities with increased access to and opportunities to participate in the general education curriculum; and

- Empower all schools to have greater curricular, instructional, and scheduling flexibility to meet the diverse needs of students with disabilities, so students can be served in the school they would have gone to if they were not disabled, whenever possible.

As part of this effort, the Department has worked on a number of fronts including allocating $33 million in new resources in 2020 to hire and train clinicians to improve the accuracy of identification and the timeliness and quality of IEPs, to pilot early interventions, and to strengthen supports for inclusive programming and rigorous instruction (Gonen, 2019). Since Shared Path to Success began, outcomes for students with disabilities have improved on a number of fronts, including higher ELA and math test scores, higher graduation rates, and lower dropout rates. These improvements mirror those seen across the system over the last decade (as discussed in our recent brief, *Better Evidence for Better Schools*). In addition, changes to practices and policies designed to increase access to inclusive environments for students with special needs have gained traction, as indicated by a steady increase in the percentage of special education students served in a general education setting for 80 percent or more of the day. In the 2016-2017 school year, for instance, the NYC DOE reported that 66 percent of students with disabilities spent this much time in general education programs—up from 53 percent in 2009-2010 (see our related Spotlight on NYC Schools post for more information).

As NYC works to meet the requirements laid out in the IDEA legislation for a free and appropriate public education in the least restrictive environment, and address the Chancellor's call for "fierce urgency" in advancing the full inclusion of students with disabilities in NYC schools, it is important to know more about who is identified for special education, how and where they are served, and how engaged they are in school. In the next section, we briefly describe the data we use to investigate these questions. We then present a series of data visualizations and short descriptions designed to illuminate notable findings. The final section of the brief highlights important questions raised by this study for policy, practice, and future research.

Data Sources

To conduct this study, we analyzed IEP data from the NYC DOE's Special Education Student Information System (SESIS), from 2013-2014 through 2015-2016, with a focus on the most recent year of data available to us (2015-2016). It is important to note that the SESIS provides information on students' IEPs and the *recommended* (as opposed to *actual*) settings and services, based on their IEPs. Students may not have been placed or served in these recommended settings. According to the DOE's most recent report, 78 percent of students in 2017-2018 received their recommended special education programs in full, an additional 19 percent received their recommended program in part, and 3 percent did not receive any of their recommended program (NYC DOE, 2018). Questions related to the special education services students *actually* receive are also crucial to address, though they are beyond the scope of this study.

Another important issue to consider is that the SESIS system has faced numerous challenges, including problems with data storage, system functionality, and performance, since its launch in 2011. These technical difficulties have led to incomplete and inaccurate data (see the NYC DOE SESIS assessment report). The department has worked over the last several years to address these issues and reports significant improvements in data quality as a result. Nonetheless, the department reported in early 2019 that they would discontinue use of the SESIS system and replace it with a new system.

For this study, we also drew on other information available in the Research Alliance's data archive, such as student demographic characteristics, census tract income data from the American Community Survey, suspension and attendance data, and responses to the annual NYC School Survey. The Survey, administered each year to students in grades 6 through 12, as well as all teachers and parents, explores a variety of issues related to school climate. We drew on Survey data to understand more about how students with disabilities and their parents perceive the environment at their school and whether these perceptions vary by type of disability or whether a student is in an inclusive or self-contained classroom setting.

Who Has an IEP?

In 2015-16, about 200,000 NYC children had an IEP. As shown in Figure 1, this represents about 20 percent of all students enrolled in the City's public schools. Remarkably, the number of students with disabilities in NYC is larger than the entire population of most school districts around the country.

Figure 1: Percent of All NYC Students Who Have an IEP

20%

80%

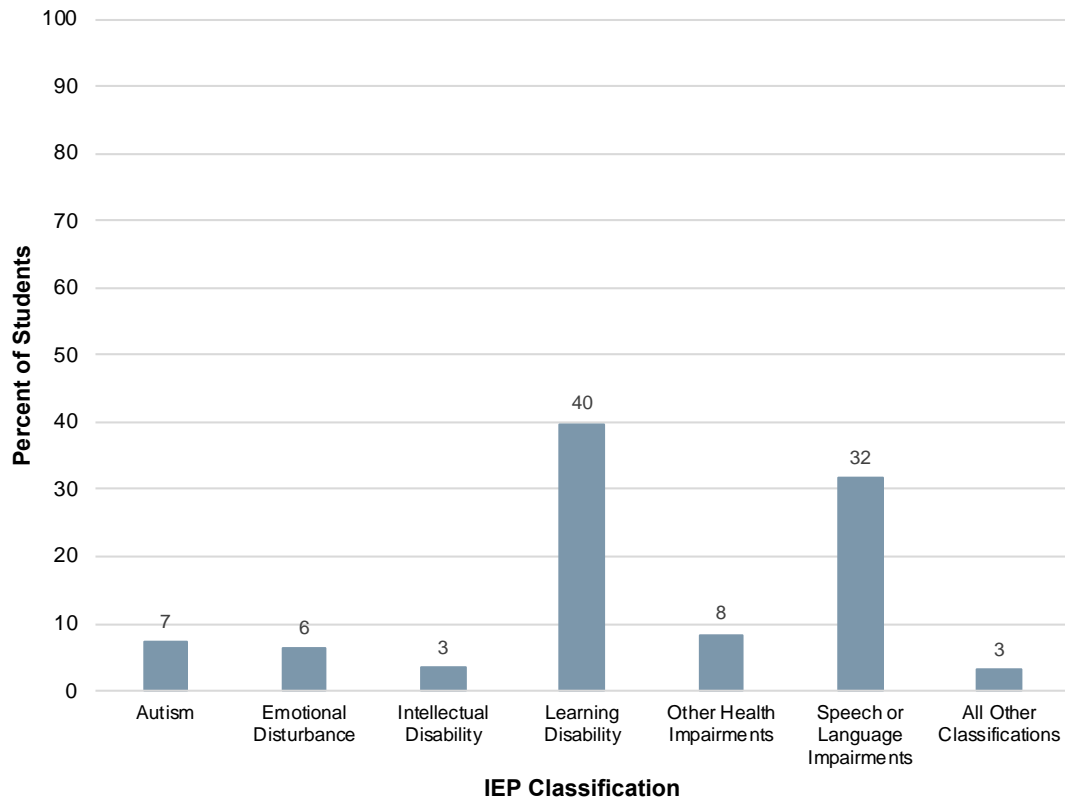■ **Students with an IEP**   ■ **Students without an IEP**
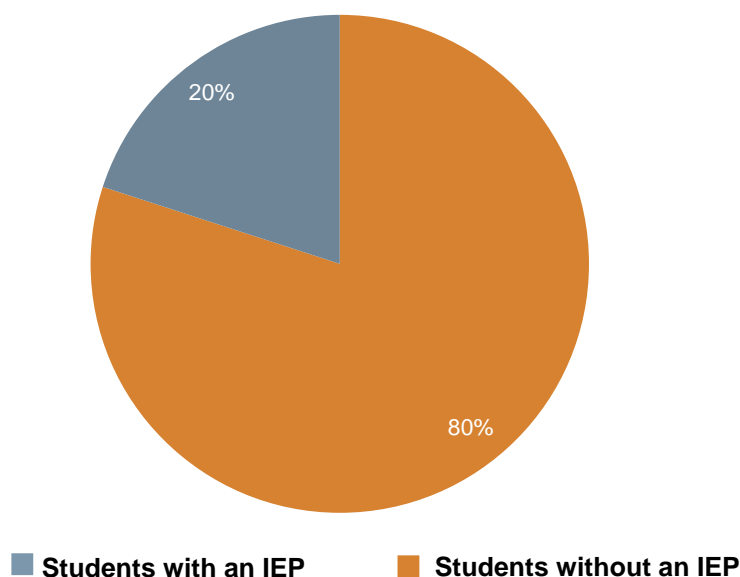
Source: Research Alliance calculations based on data provided by the NYC Department of Education.
Notes: Data are for the 2015-2016 school year. N = 1,067,653. For other notes, see page 22.

Mirroring national figures, the most prevalent disability classifications for this group of students were learning disabilities and speech or language impairments. As shown in Figure 2, about 40 percent of students with disabilities had learning disabilities, 32 percent had speech or language impairments, 8 percent had other health impairments, 7 percent had autism, and 6 percent had a disability classified as emotional disturbance. The textbox on the next page provides more information about each of these disability classifications.

Figure 2: Students with IEPs, by Classification

Source: Research Alliance calculations based on Special Education Student Information System (SESIS) data obtained from the NYC Department of Education.
Notes: Data are for the 2015-2016 school year. N = 211,425. For other notes, see page 22.

As noted above, over- and underrepresentation of particular groups of students in special education may occur for a variety of reasons, including inappropriate classification, as well as under-diagnosing. Both have negative consequences. Inappropriate identification may lead to negative outcomes associated with less access to rigorous curriculum, lower expectations, social stigma, and segregation from general education peers (NEA, 2008; NRC, 2002). Students who are undiagnosed are missing out on necessary services that could help improve their outcomes. Identifying areas where over- and underrepresentation occurs gives us a starting place to investigate the reasons for these disparities and to develop strategies that effectively address them.

What Do the Disability Classifications Include?

Autism is a developmental disability that affects verbal and nonverbal communication and social interaction.

Intellectual disability refers to significantly sub-average general intellectual functioning with "deficits in adaptive behavior."

Learning disabilities include dyslexia, congenital brain injuries, disorders that affect how people process and interpret what they see and hear, as well as a variety of other learning problems.

Speech or language impairments refer to communication disorders (such as stuttering, problems with articulation, and voice impairments) that interfere with a student's performance in school.

Emotional disturbance includes behaviors or feelings that occur over a long period of time and have a marked, adverse effect on educational performance. It includes depression, anxiety, obsessive compulsive and conduct disorders.

Other health impairments include conditions that result in "limited strength, vitality or alertness" stemming from chronic or acute health problems, such as a heart condition, asthma, epilepsy, lead poisoning, epilepsy, Tourette syndrome, and attention deficit disorder.

Other disabilities include traumatic brain injury, orthopedic impairments, multiple disabilities, hearing impairment, deafness, deaf-blindness, and visual impairments.
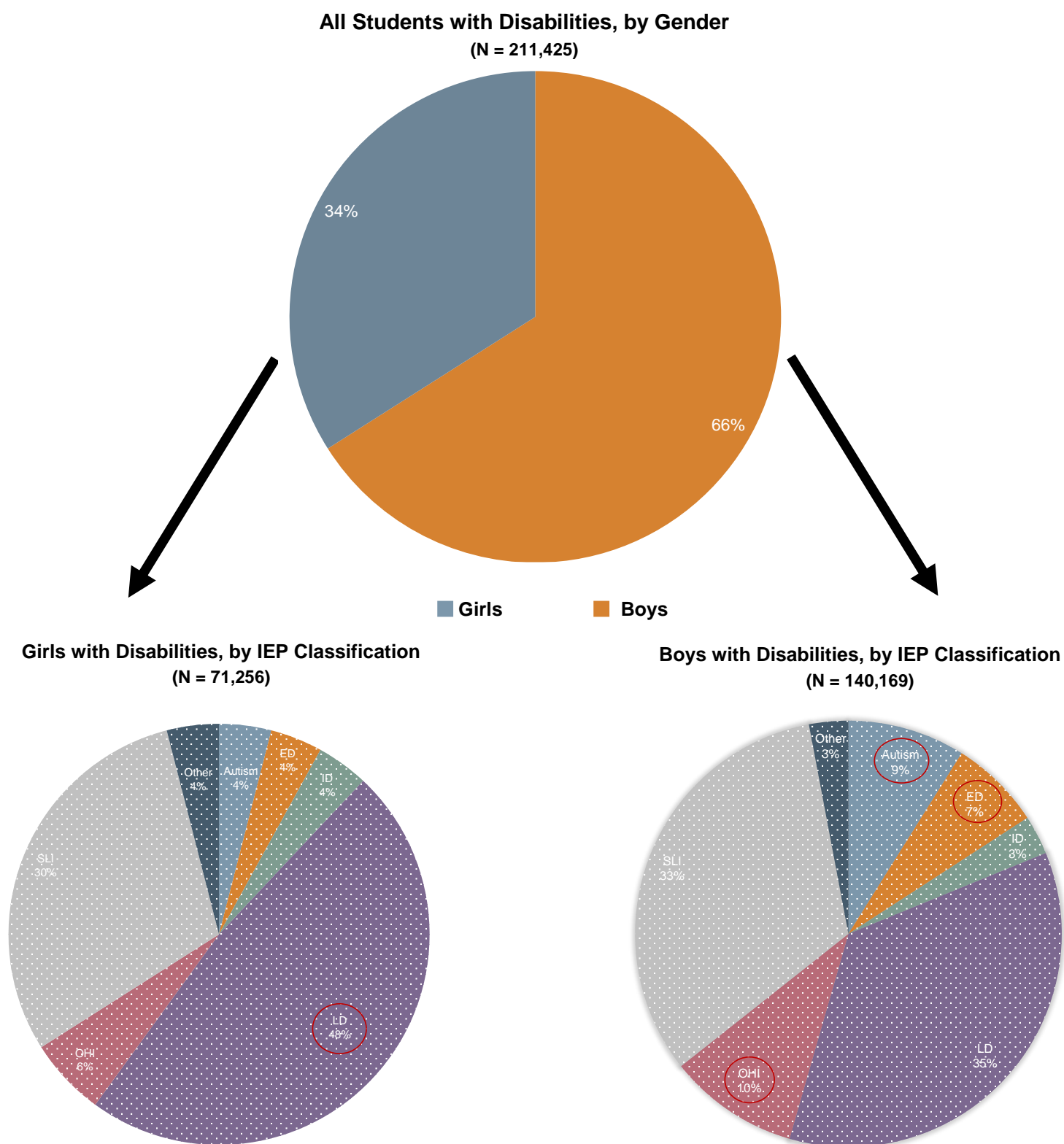
Differences in IEP Classification by Gender and Race

Here, as in other districts around the country, there are gender, race/ethnicity, and socio-economic differences in the likelihood of having an IEP and in the types of disabilities with which students are diagnosed. Examining SESIS data from the 2015-2016 school year, we found that:

Boys outnumber girls with IEPs by two to one. As shown in Figure 3 on the next page, 66 percent of all students with disabilities were boys, even though they make up only half of the NYC public school population as a whole. Boys were particularly overrepresented among students classified with autism, emotional disturbance, and other health impairments, such as attention deficit disorder. Figure 3 shows that 9 percent of boys with disabilities had autism, compared with 4 percent of girls with

Figure 3: Differences Associated with Gender

All Students with Disabilities, by Gender
(N = 211,425)

34%

66%

■ Girls   ■ Boys

Girls with Disabilities, by IEP Classification
(N = 71,256)

Other 4%
Autism 4%
ED 4%
ID 4%
SLI 30%
LD 48%
OHI 6%

Boys with Disabilities, by IEP Classification
(N = 140,169)

Other 3%
Autism 9%
ED 7%
ID 3%
SLI 33%
LD 35%
OHI 10%

Source: Research Alliance calculations based on Special Education Student Information System (SESIS) data obtained from the NYC Department of Education.

Notes Data are for the 2015-2016 school year. For other notes, see page 22.

disabilities. Similarly, 7 percent of boys with disabilities were classified with emotional disturbance, compared with 4 percent of girls. Conversely, girls with disabilities were more likely to be classified with learning disabilities (48% of girls with IEPs versus 36% of boys). Overrepresentation of boys in special education has been traced in part to biological differences. This is true for higher rates of autism, attention deficit disorder, and sex-based chromosomal diseases such as Fragile X syndrome—a disorder linked to range of disabilities (Coutinho & Oswald, 2005).

Black and Latino students are overrepresented in special education. As shown in Figure 4 on the next page, we found that 6 percent of NYC students with IEPs were Asian, 31 percent were Black, 48 percent were Latino, and 13 percent were White. These rates are very different from the racial/ethnic breakdown of all students in NYC public schools (16% Asian, 27% Black, 41% Latino, 15% White). However, the pattern of racial disparities is similar to that seen nationally, where students of color—particularly Native American, Black and Latino students—are enrolled in special education and classified with specific types of disabilities at higher rates than other students (Office of Special Education and Rehabilitative Services, 2018).

In NYC, **Asian and Latino students are disproportionately classified with speech or language impairments.** Figure 4 shows that over 35 percent of Asian and Latino students with disabilities had speech or language impairments, compared with 26 and 29 percent, respectively, for Black and White students with disabilities. This difference may be driven in part by the fact that students who are English Language Learners are sometimes misdiagnosed with speech or language impairments as a result of inappropriate, inaccurate or biased assessment tools and strategies (GAO, 2019).

Asian and White students are diagnosed with autism at higher rates than their Black and Latino peers. Figure 4 shows that 10 percent of Asian and 11 percent of White students with an IEP had autism, compared with 7 and 6 percent for Black and Latino students respectively. The underrepresentation of Black and Latino students in autism may be related to lack of access to medical insurance and services (Liptak et. al., 2008). Unlike some classifications that are frequently diagnosed by school staff, such as learning disabilities and speech or language impairments, autism is diagnosed by a medical doctor or trained clinician. Therefore, lack of access to medical services (for example, because a family does not have health insurance) may result in underdiagnosing autism.
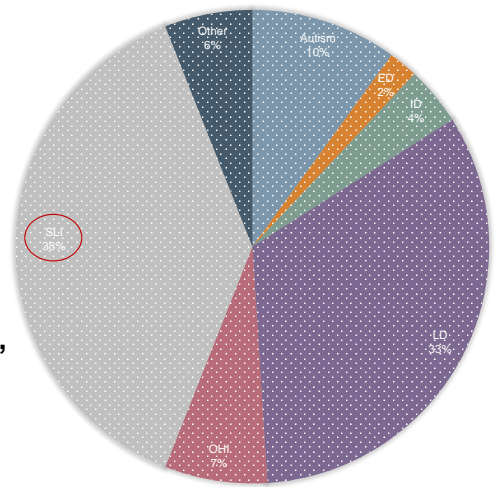
Black students are more than twice as likely as other students to have an IEP for emotional disturbance. This finding held true for both girls and boys. Overall, as shown in Figure 4, 11 percent of Black students with disabilities were classified as having emotional disturbance, compared with between 2 and 5 percent for all other groups. This overrepresentation may be due to biased assessments, or to environmental factors that disproportionately affect Black students, including emotional stress, poor nutrition, and exposure to toxins (Donavan & Cross, 2002; Vallas, R. 2009).
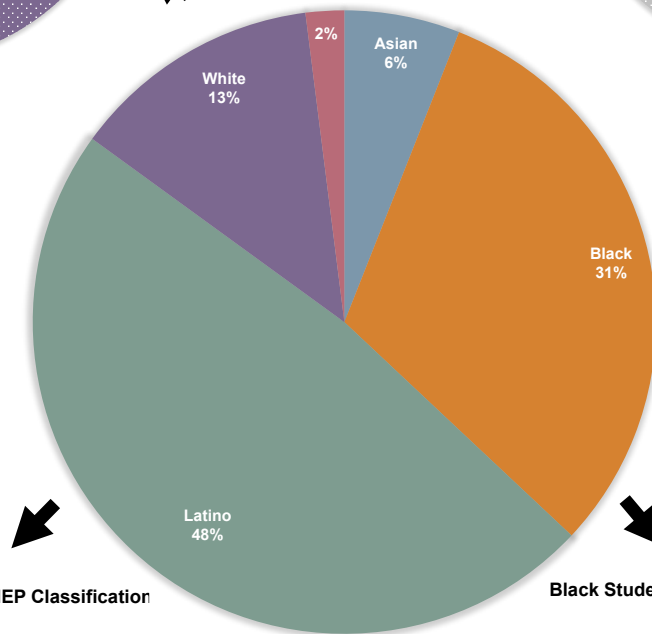
Figure 4: Differences Associated with Race/Ethnicity

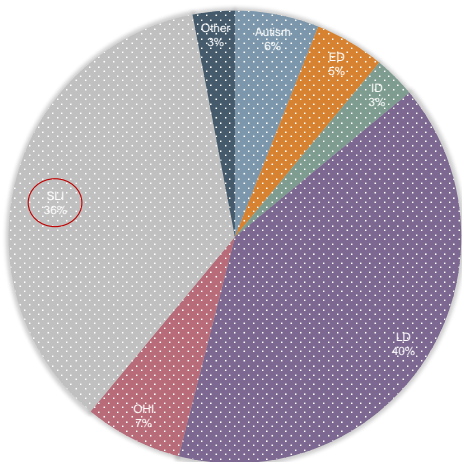**White Students with Disabilities, by IEP Classification**
N = 26,870

Other 4%
Autism 11%
ED 4%
ID 2%
SLI 29%
LD 36%
OHI 14%
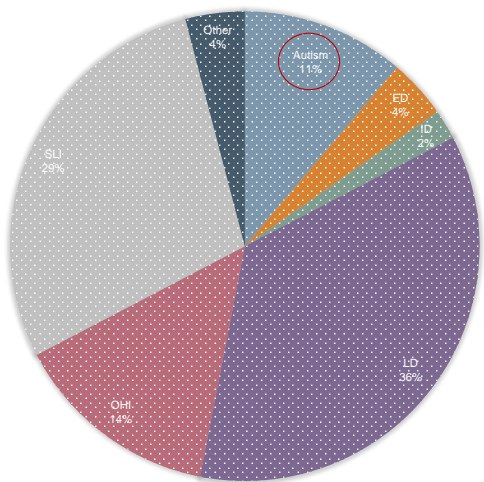
Asian Students with Disabilities, by IEP Classification
N = 13,612

Other 6%
Autism 10%
ED 2%
ID 4%
SLI 38%
LD 33%
OHI 7%

All Students with Disabilities, By Race/Ethnicity

2%
White 13%
Asian 6%
Black 31%
Latino 48%

Latino Students with Disabilities, by IEP Classification
N = 101,813

Other 3%
Autism 6%
ED 5%
ID 3%
SLI 36%
LD 40%
OHI 7%

Black Students with Disabilities, by IEP Classification
N = 65,756

Other 3%
Autism 7%
ED 11%
ID 4%
SLI 26%
LD 41%
OHI 8%
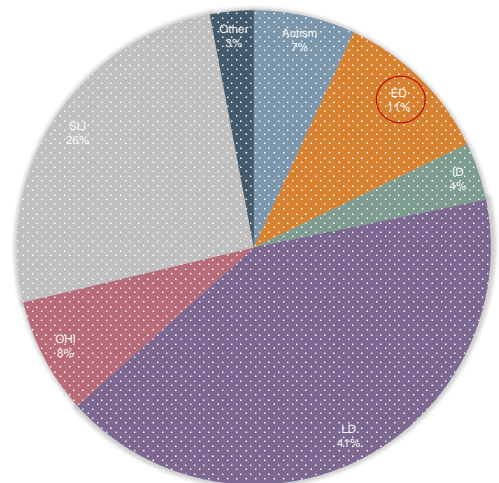
Source: Research Alliance calculations based on Special Education Student Information System (SESIS) data obtained from the NYC Department of Education.

**Notes:** Data are for the 2015-2016 school year. N = 211,425. For other notes, see page 22.

Differences in IEP Classification by Income and Geography

The relationship between poverty and disability is well documented, with evidence suggesting that poverty is both a cause and consequence of some disabilities (Donavan & Cross, 2002; Palmer, 2011). This pattern is prevalent in NYC as well. Our analyses revealed that:

Students with IEPs are more likely to live in low-income neighborhoods than their non-disabled peers. Just over half (51%) of students with IEPs lived in a low-income neighborhood, compared with 44 percent of their non-disabled peers.

Students' specific disability classifications are also associated with neighborhood income. As shown in Figure 5, for example, students with learning disabilities, emotional disturbance, and speech or language impairments are more likely to live in low-income neighborhoods than their peers with autism. Disparities associated with income and race/ethnicity are clearly overlapping, given that Black and Latino students in NYC are more likely than White and Asian students to live in impoverished neighborhoods. It is difficult to tease apart the influence of racial bias, environmental factors, and access to healthcare and other resources. (As we discuss below, future research could provide important evidence about the roots of these disparities.)

Figure 5: IEP Classification, by Neighborhood Income
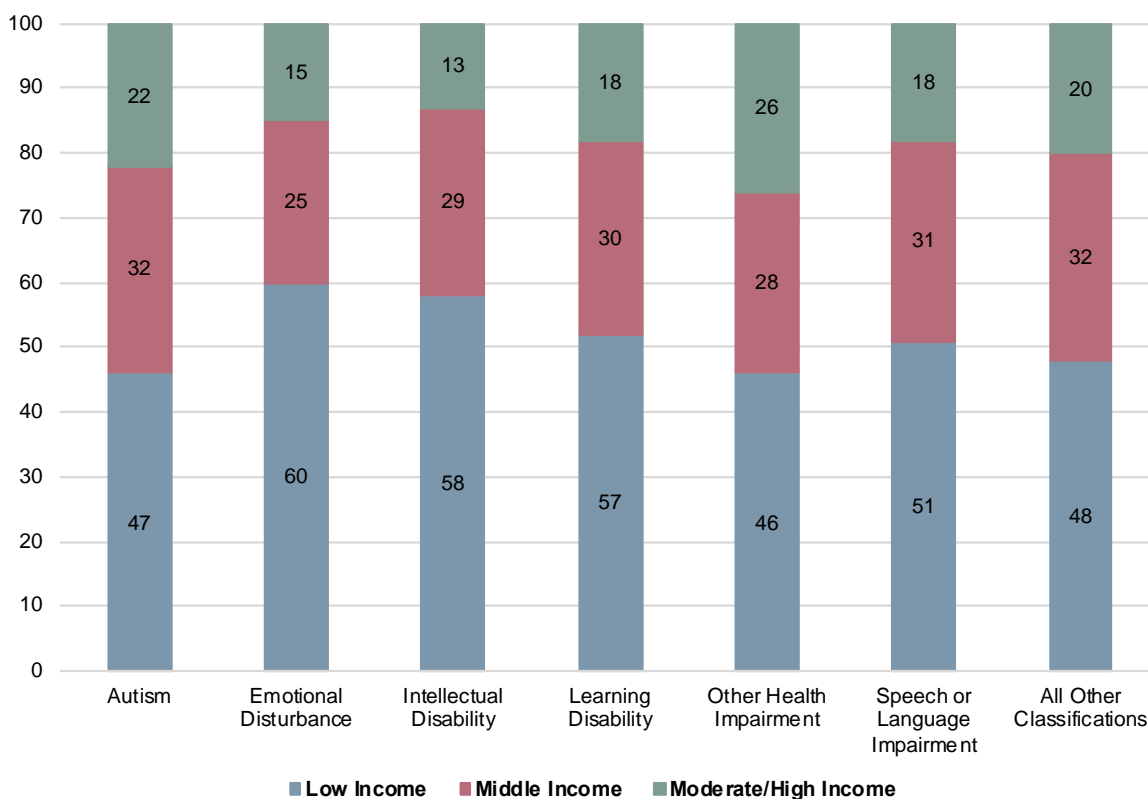
Source: Research Alliance calculations based on Special Education Student Information System (SESIS) data obtained from the NYC Department of Education. 2016 mean family income data were extrapolated from 2000 and 2010 US Census data.

Notes: Data are for the 2015-2016 school year. N = 194,771. For other notes, see page 22.

What is clear is that **students with disabilities are not spread out equally across the City.** This is perhaps unsurprising in light of the differences in classification by race/ethnicity and income, and the high degree of racial and socioeconomic segregation in NYC's housing. As shown in the map below (Figure 6), the percentage of students with IEPs varied greatly by census tract, ranging from less than 5 percent in some parts of the City (e.g., District 26 in Queens) to over 25 percent in others (e.g., District 4 in East Harlem). Generally speaking, disability rates were higher in low-income neighborhoods.

These geographic differences in the concentration of students with IEPs have implications for resource allocation. Areas of the City with a higher proportion of students with disabilities may require more resources to meet their needs (such as accessible buildings[1] and access to special programs and related service providers).

Figure 6: Percent of Students with an IEP in Each NYC Census Tract

Percent of Students with an IEP
- 0 - 5%
- > 5 - 10%
- > 10 - 15%
- > 15 - 20%
- > 20 - 25%
- > 25 - 40%
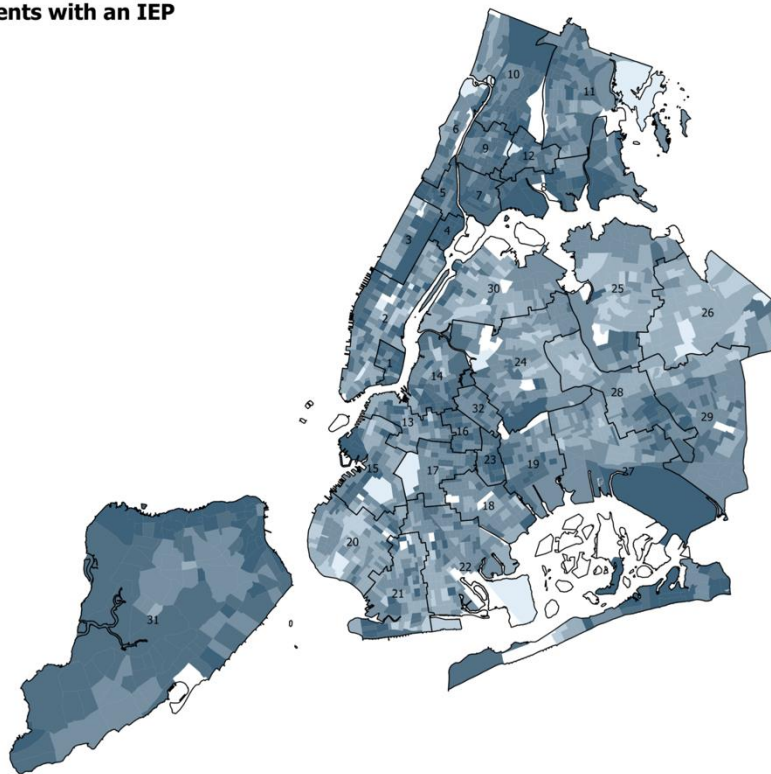
Source: Research Alliance calculations based on Special Education Student Information System (SESIS) data obtained from the NYC Department of Education.

Notes: Data are for the 2015-2016 school year. N = 194,820. For more notes, see page 22.

Where Are Students with Disabilities Served?

Students with disabilities are served in a variety of settings, including Community School Districts 1-32, charter schools, and District 75, a special district in the City that serves students with low-incidence disabilities[2] or highly specialized needs. Recommended placements are based on the IEP team's assessment of the students' cognitive, social-emotional and physical needs. They must take into consideration the mandate to serve students in the least restrictive environment possible and preferably in the school they would have attended if they did not have a disability.

Schools Attended

Our analyses of SESIS data from the 2015-2016 school year showed that:

Most NYC students with disabilities are served in traditional public schools. We found that 81 percent of all students with IEPs were served in Community School Districts 1-32. An additional 11 percent were served in District 75, 7 percent were served in charter schools (District 84), and 1 percent were served in district 79, the alternative high school district.

Figure 7: IEP Classifications in Different Types of Schools
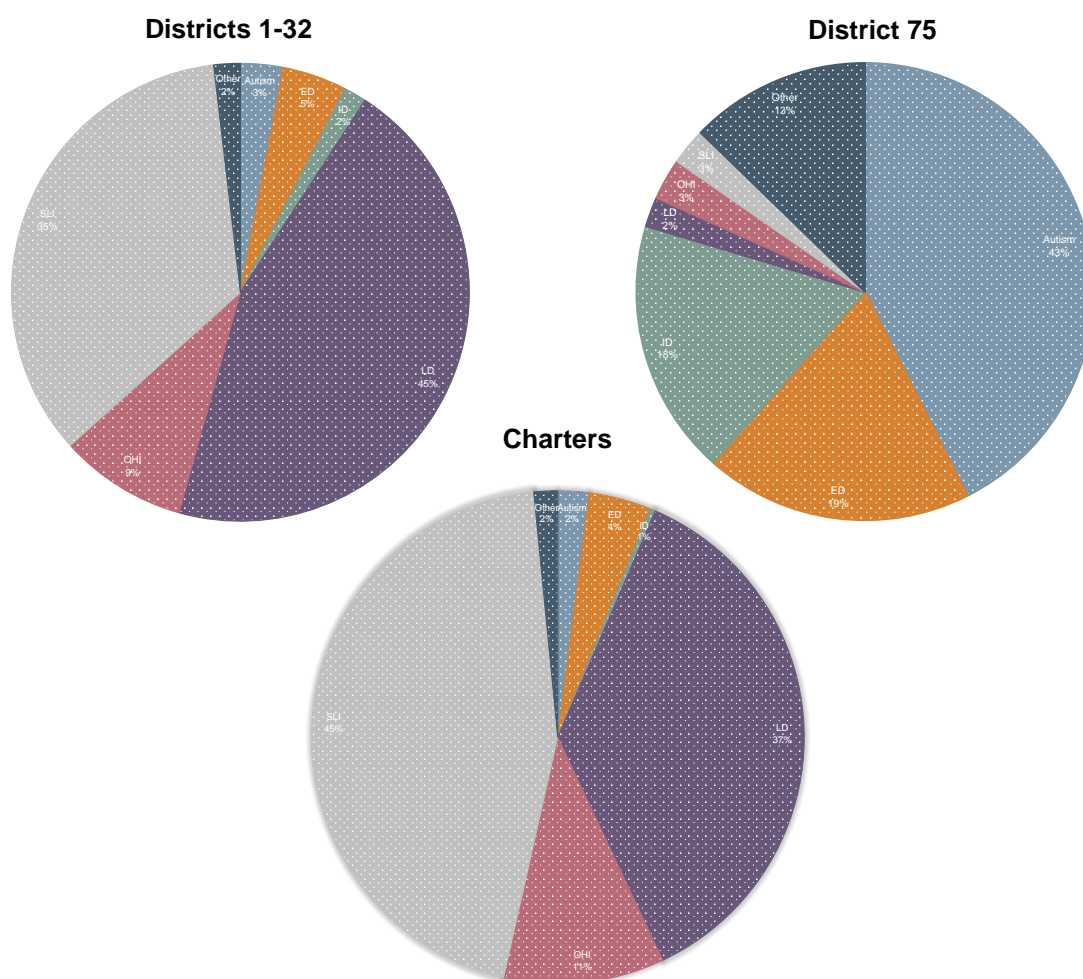
Source: Research Alliance calculations based on Special Education Student Information System (SESIS) data obtained from the NYC Department of Education.
Notes: Data are for the 2015-2016 school year. N = 211,425. For more notes, see page 22.
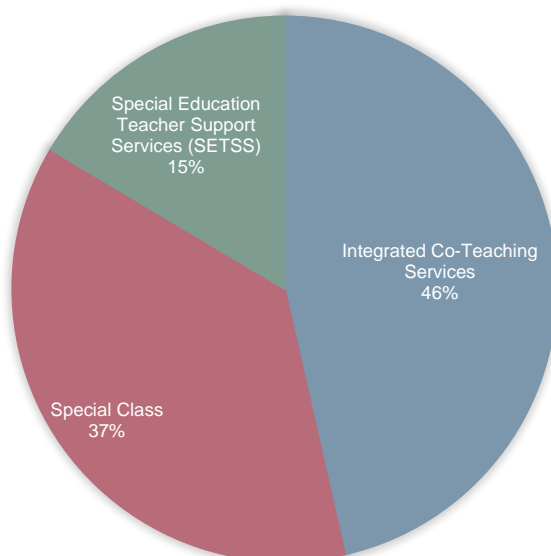
Students with autism, emotional disturbance and intellectual disabilities are more likely to be served in District 75, compared with their peers with other types of disabilities (see Figure 7 on the previous page). This likely reflects the more challenging nature of their disabilities and the need for highly specialized support.

Charter school enrollment patterns look somewhat different than those in traditional public schools. Previous research has suggested that charter schools enroll fewer students with disabilities than traditional public schools (NCES, 2018). Our findings provide a certain degree of support for this (9 percent of the City's students without an IEP were enrolled in a charter school, while only 7 percent of students with an IEP were enrolled in one). Similar to other studies, we also found notable differences in the prevalence of specific disability types within charters. For example, as shown in Figure 7, charter schools were more likely to serve students with learning disabilities, other health impairments, and speech/language impairments than students with other types of disabilities.

Inclusive Classroom Settings

IEPs recommend more or less inclusive settings, based on an assessment of each students' needs and abilities. **For a majority of NYC students in special education, their IEPs recommend placement in an inclusive setting for some part of the day**. As shown in Figure 8, 46 percent of students with disabilities are recommended for an Integrated Co-Teaching (ICT) classroom—a setting co-taught by a special education and general education teacher, where up to 40 percent of the class's students have an IEP. An additional 15 percent are recommended to receive Special Education Teacher Support Services (SETSS), where students are provided support from a special education teacher while in a general education classroom. The remaining 37 percent are recommended for a special class (SC) setting for at least part of the day. Special classes are self-contained classrooms where students are served in smaller groups with peers who have similar academic and behavioral needs.

Figure 8: Recommended Instructional Setting

Special Education Teacher Support Services (SETSS) 15%
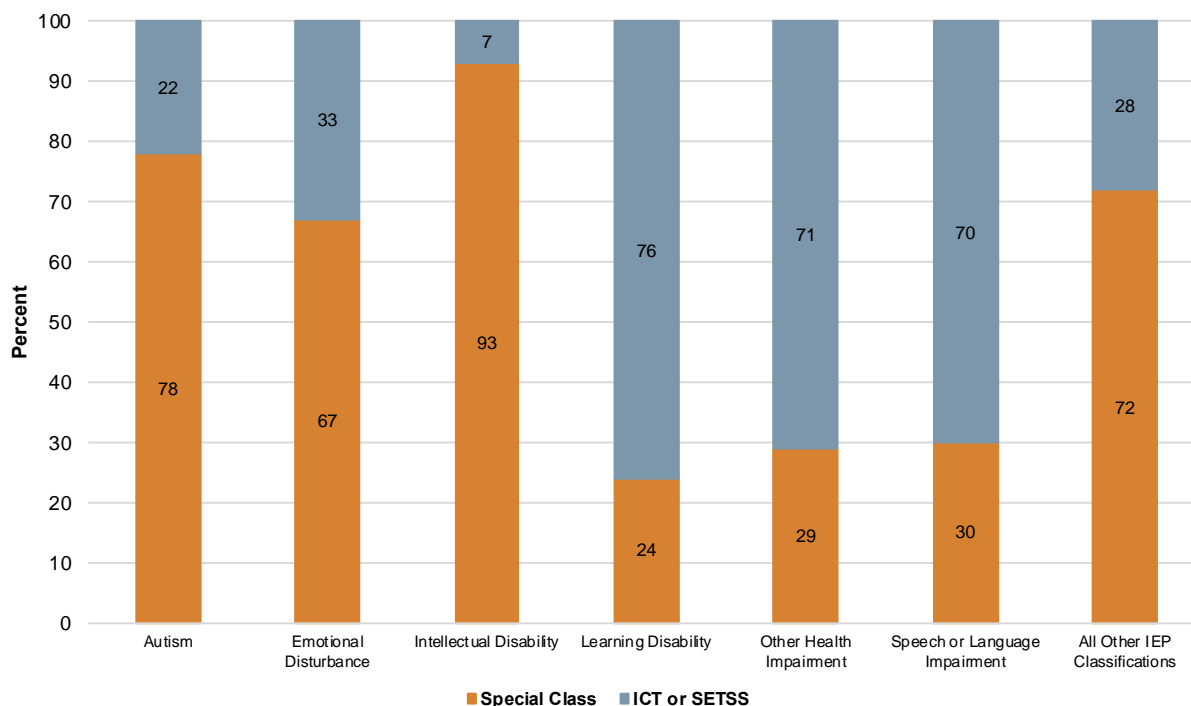
Integrated Co-Teaching Services 46%

Special Class 37%

Source: Research Alliance calculations based on Special Education Student Information System (SESIS) data obtained from the NYC Department of Education.

Notes: Data are for the 2015-2016 school year. N = 196,115. For more notes, see page 22.

There are substantial differences in placement recommendations associated with students' background characteristics and disability type. For example, as shown in Figure 9, we found that students classified with autism, emotional disturbance, and intellectual disabilities are predominately recommended for self-contained classrooms. Because boys and students of color are disproportionately classified with these types of disabilities, they are also disproportionately recommended for self-contained classrooms.

Figure 9: Recommended Instructional Setting, by IEP Classification
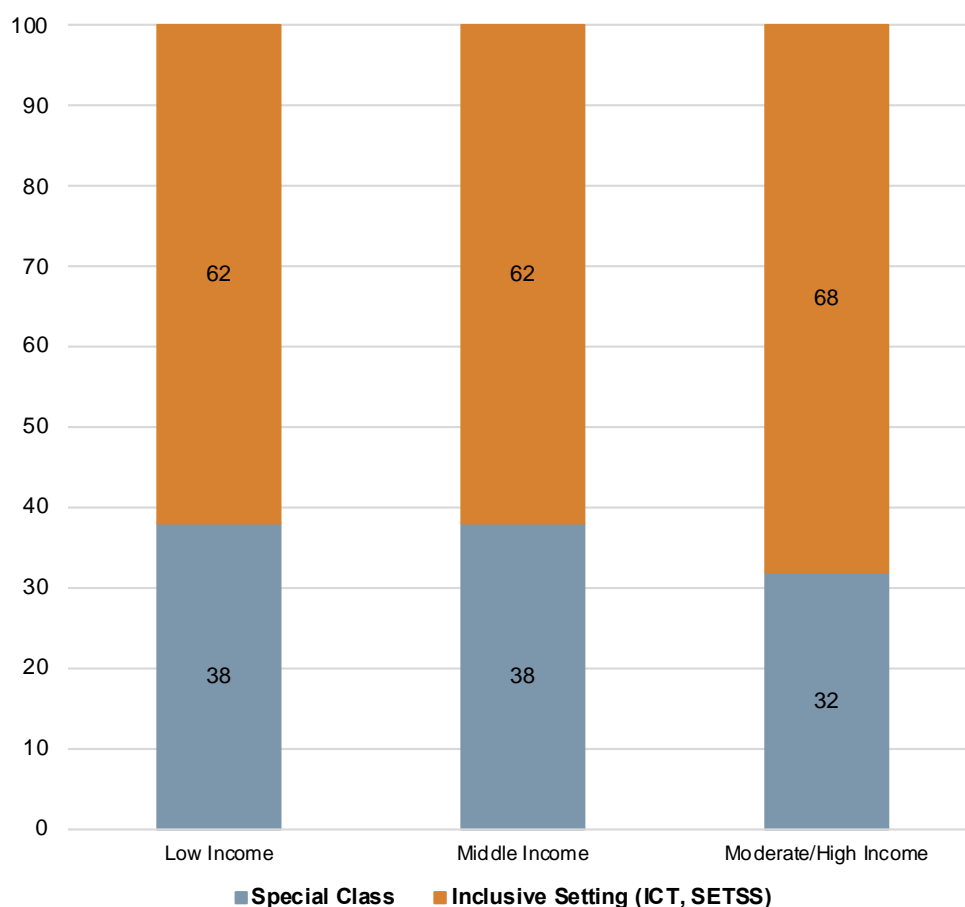

Source: Research Alliance calculations based on Special Education Student Information System (SESIS) data obtained from the NYC Department of Education.
Notes: Data are for the 2015-2016 school year. N = 196,115. For more notes, see page 23.

Students living in neighborhoods with higher median income levels are more likely to be recommended for inclusive (ICT or SETSS) settings, as shown in Figure 10 on the next page. It is worth pointing out here that our data only reflect students enrolled in public schools. Students living in higher-income neighborhoods may be more likely to attend private schools, where patterns of placement in inclusive settings may be very different than those seen for public school students. Nonetheless, the differences in recommended placement that are associated with neighborhood income raise important questions that should be examined in future research.

Figure 10: Recommended Instructional Setting, by Neighborhood Income

Source: Research Alliance calculations based on Special Education Student Information System (SESIS) data obtained from the NYC Department of Education. 2016 mean family income data were extrapolated from 2000 and 2010 US Census data.
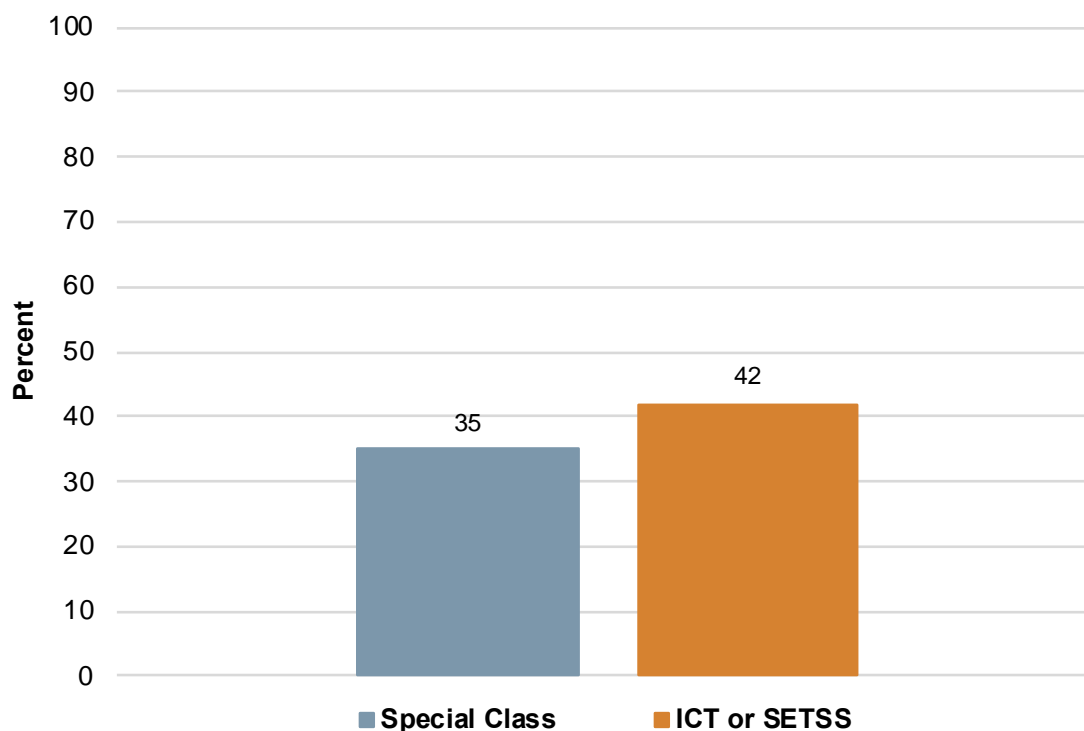
Notes: Data are for the 2015-2016 school year. N = 194,771. For more notes, see page 23.

One of the hypothesized benefits of serving students in an inclusive setting is that it facilitates interaction between students with disabilities and their general education peers, allowing for the development of social relationships and a more inclusive climate. We know from prior research that a supportive school climate is linked to healthy development and academic achievement for all students (Kraft, Marinell, and Yee, 2016). Data from the annual NYC School Survey provide insight into the experiences and perceptions of school climate of middle and high school students with disabilities, and how these vary in different educational settings.[3]

Overall, as shown in Figure 11 on the next page, **students with disabilities served in inclusive environments are somewhat more positive about the school climate than those in self-contained classrooms.** Specifically, we found that students in inclusive settings (i.e., ICT or SETTS classes) reported greater agreement with the statements: "students at this school treat each other with respect" and "students at this school include students with disabilities in all school activities." They reported greater disagreement with the statement "students in this school harass or bully other students" than their peers in self-contained classrooms.

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Figure 11: Positive Perceptions of School Climate, by Recommended Instructional Setting

Source: Research Alliance calculations based on Special Education Student Information System (SESIS) data obtained from the NYC Department of Education.
Notes: Data are for the 2015-2016 school year. N = 60,695. Bars show the percent of students agreeing with all three statements: "students at this school treat each other with respect," "at this school students harass or bully other students" (reverse coded), and "students at this school include students with disabilities in all school activities". For more notes, see page 23.

The difference between students in self-contained and inclusive settings was less pronounced among students classified with emotional disturbance. And for students with intellectual disabilities, the pattern was reversed: Students in self-contained settings more frequently agreed with positive statements about school climate than their peers in inclusive settings. This may be because intellectual disabilities can be more 'visible' than other types of disabilities, exposing students to more harassment or bullying in general education settings. It is important to note that many students with intellectual disabilities, particularly those with more significant needs, did not respond to the Survey.

The School Survey also asks parents questions about the extent to which schools reached out to them, the level of trust between parents and teachers, and their involvement in the school. Among parents of students with disabilities in the 2015-2016 school year, responses to these items were generally positive, and we did not find any notable differences associated with their child's placement in an inclusive or self-contained environment.
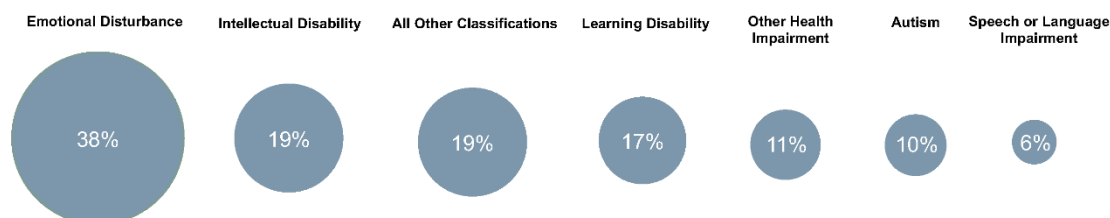
How Engaged Are Students with Disabilities?

The third area covered in this landscape review—and one where disparities are particularly troubling because they are likely to exacerbate other inequalities—is student engagement, as captured by absenteeism and suspension rates. Serious absenteeism has been associated with poor achievement (Gottfried, 2010), and suspensions further reduce the amount of instructional time students receive. In addition, suspensions have been found to be associated with a host of negative outcomes for students, including grade retention, disengagement from school, and contact with the juvenile justice system (Fabelo, et. al., 2011).

Attendance

Our analysis highlighted that **students in NYC's special education system have high rates of chronic absenteeism**. We found that 13 percent of students with disabilities were "severely chronically absent," meaning they missed 36 or more days—almost two months—of school per year. As shown in Figure 12, severe chronic absentee rates varied substantially by disability type. For example, 38 percent of students with emotional disturbance and 19 percent of students with intellectual disabilities were severely chronically absent, compared with 10 percent of students with autism and 6 percent of those with speech or language impairments.

Figure 12: Severe Chronic Absentee Rates, by IEP Classification

Emotional Disturbance	Intellectual Disability	All Other Classifications	Learning Disability	Other Health Impairment	Autism	Speech or Language Impairment
38%	19%	19%	17%	11%	10%	6%

Source: Research Alliance calculations based on data obtained from the NYC Department of Education.
Notes: Data are for the 2015-2016 school year. N = 200,516. For other notes, see page 23.

Suspensions

Overall, 4 percent of students with disabilities were suspended at least once during the 2015-2016 school year. **As with attendance, suspension rates varied greatly by disability type.** As shown in Figure 13 on the next page, we found that 12 percent of students classified with emotional disturbance were suspended at least once during the year, compared with 5 percent of students with learning disabilities and other health impairments, and less than 2 percent of students with other disability classifications.

Figure 13: Suspension Rates, by IEP Classification

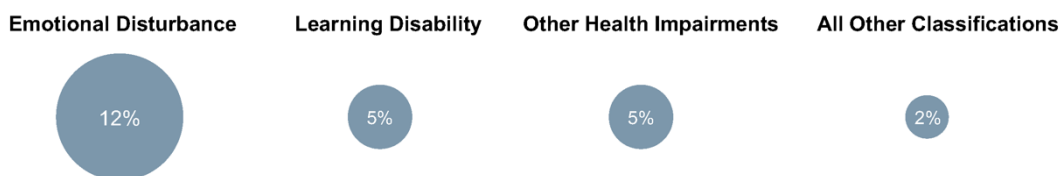| Emotional Disturbance	Learning Disability	Other Health Impairments	All Other Classifications
12%	5%	5%	2%

Source: Research Alliance calculations based on data obtained from the NYC Department of Education.
Notes: Data are for the 2015-2016 school year. N = 211,425. For other notes, see page 23.

Boys with disabilities were more frequently suspended than girls with disabilities, and Black and Latino students with disabilities were more frequently suspended than peers of other races/ethnicities. These gender and racial disparities are also prevalent among general education students.

Questions Raised for Policy, Practice, and Research

The landscape of students with disabilities in NYC is large and varied. The sheer number of students with IEPs in the district is unprecedented. As this brief shows, students with special needs are not a monolithic group. They vary in terms of their backgrounds, specific disability types, and educational needs. This diversity suggests there is no single best program, setting, or service to meet the needs of all students with disabilities.

The analyses presented here highlight concerning disparities in patterns of disability classification, placement in inclusive settings, attendance, and suspension rates. The differences in these areas fall along lines too frequently observed in education settings, disproportionally affecting students of color and poor students. They raise a number of important questions for policy, practice, and research, discussed below.

What can be done to reduce over- and underrepresentation of certain students in special education?

As noted earlier, there is ongoing debate about whether students of color are under- or overrepresented in special education. Recent research suggests that both might be the case: In some instances, particularly in schools that are predominately White, Black and Latino students may be over-identified as disabled. In other cases, especially in schools serving predominately students of color, they may under-identified and missing out on needed services (Elder, et. al. 2019; Fish, 2019). Though we don't know all of the reasons that some students are over- or underrepresented in special education, we do know some of the factors that contribute to disproportionality, including biased and inaccurate assessments, lack of access to medical professionals qualified to diagnose certain disabilities, and exposure to environmental toxins (such as lead poisoning) and stressors that cause disabilities. These factors are more likely to affect poor students and students of color. They are also potentially malleable—particularly if we can develop evidence to help answer the following questions:

- How can we improve accuracy and reduce bias in the evaluations used to diagnose disabilities? What type of professional development and support do those conducting assessments need to ensure more accurate and culturally responsive evaluations?

- How can we increase students' access to appropriate health care for disabilities that require a medical diagnosis?

- How can we support schools, families, and communities in identifying and remediating environmental factors that cause disabilities?

What would it take to increase the number of students served in inclusive educational settings?

New York City, like other districts around the nation, has made it a policy priority to serve students with disabilities in inclusive environments. To this end, the District has devoted resources to strengthening inclusive programming and supports aimed at ensuring that students are placed in the least restrictive setting. Research suggests there are significant benefits to both general education students and students with disabilities in doing so (Research Alliance, internal analyses; Hehir et. al., 2016; NCD, 2018). Nonetheless, despite being a prominent mandate of the Individuals with Disabilities Act legislation, the law does not specify what an inclusive environment should look like, or the particular pedagogical strategies and structures that facilitate an effective inclusive environment.

Many advocates note that inclusive education should be about more than the placement of students with disabilities next to general education students in a regular classroom (Hehir et. al., 2016). Instruction must also be individualized for students with disabilities, with appropriate modifications and adaptations to meet students' specific needs. However, a recent survey found that many educators do not feel equipped to meet the needs of students with disabilities in inclusive settings (NCLD, 2019). Our findings highlight that, in general, students with disabilities in inclusive settings have a more positive view of their school climate than those in self-contained classrooms. But this pattern is reversed for students with intellectual disabilities. More research could help identify effective instructional strategies and school-wide practices that help foster a welcoming, caring and respectful environment for all students with disabilities. Answering the following questions are key to advancing the goal of increasing students' access to inclusive environments:

- What drives large disparities (especially in terms of race/ethnicity, income, geography, and disability type) in students' placement in inclusive settings?

- What are the qualities of *successful* inclusive environments? Are there different models of inclusion that are more effective for different types of students?

- Beyond the classroom, how can schools create a culture of inclusion, where every student feels a sense of safety and belonging?

- What type of professional development and support do administrators and educators need to successfully serve students with disabilities in inclusive environments?

- Under what circumstances are self-contained classes warranted, if any?

What can be done to improve attendance for students with disabilities?

As shown by the analyses in this brief, a high percentage of students with disabilities are chronically absent from school. The negative consequences of missing school are well documented for general education students, and are especially detrimental to students with special needs. While some students have chronic health issues that may prevent them from attending, the reasons behind low attendance for other students with disabilities are less clear, prompting the following questions:

- What is driving chronically low attendance? What are the supports and practices schools and educators can put in place to improve attendance among students with disabilities?

- Are there school climate factors that contribute to low attendance for students with disabilities (e.g., bullying or exclusion)? If so, how can they be addressed?

What can be done to reduce and address disparities in suspensions?

The high rate of suspensions for students with disabilities, particularly among boys and Black students, is also concerning. Given the negative consequences associated with removing students, these findings raise questions about possible alternative approaches to suspension. In 2019-20, NYC is introducing a new framework that emphasizes alternatives such as restorative justice and implementing a social-emotional learning curricula, as well as changes to the discipline code aimed at reducing suspensions. The district is also facilitating cross-divisional collaborations to support behavioral interventions for students. Looking forward, it will be important to examine whether these approaches successfully address student discipline without removing students from school and losing valuable instructional time. Among the questions that need to be answered:

- Which practices show the most promise for addressing behavior and preventing problems from escalating to the point of removing children from school?

- How do these practices affect the larger school climate and outcomes?

- Are there alternatives to suspensions that are particularly effective for students with various types of disabilities?

Conclusion

This brief explores the contours of the special education landscape in NYC public schools, describing who is in special education, placement in inclusive or segregated environments, and school engagement among students with disabilities, as reflected in attendance, suspension rates, and perceptions of school climate. The disparities we found, associated with race/ethnicity, poverty, and gender, are consistent with those observed nationwide. These disparities point to the need for more accurate evaluation systems, and practices and policies that foster inclusion and support for student engagement in school. They also indicate the need to continue to investigate the underlying factors driving these disparities, and possible remedies.

This project has enabled us to create an unprecedented database on students with disabilities in NYC. However, there are a number of questions of interest to the special education community that we were not able to address in this study, given limits of the current data. Specifically, as noted earlier, we only have access to service and placement recommendations, not actual services received. It is important to investigate the extent to which the disparities seen here are replicated in the actual experiences of students with disabilities. Further, the administrative data currently available do not allow us to explore flexibility in students' schedule, where they may participate in some subjects or classes with general education peers while receiving more specialized support in other subjects. The Shared Path to Success reform encourages such flexibility to maximize the extent to which students are served in inclusive environments.

Additionally, IEPs include a large amount of detailed data on students' functioning level, educational needs, goals, progress, and post-secondary transition plans that are not currently available to researchers. These data are extraordinarily rich and could potentially be used for additional and more nuanced research, such as identifying types of students who may benefit from additional supports, and determining which services, placements, and conditions are most effective and therefore promising for scale up and replication. As the district explores alternatives to the problematic SESIS system, it should consider a system that allows for use of the fine-grained information documented on students' IEPs. These data would allow us to answer important new questions and provide vital evidence to inform more effective policies and practices for students with disabilities.

Endnotes

1   An estimated 80 percent of NYC public school buildings are not fully accessible to students with physical disabilities. NYC recently allocated $150 million in funding towards increasing accessibility (Zimmerman, 2018).

2   Low-incidence disabilities are visual or hearing impairments, significant cognitive impairments; or "any impairment for which a small number of personnel with highly specialized skills and knowledge are needed in order for children with that impairment to receive early intervention services or a free appropriate public education" (IDEA section 1462 (c) https://sites.ed.gov/idea/statute-chapter-33/subchapter-IV/part-B/1462/c).

3   It is important to note that students served in self-contained settings and students with intellectual disabilities were much less likely to respond to the School Survey than students in inclusive setting and with other types of disabilities.

Additional Figure and Table Notes

Figure 1: Figure includes all active students over age five enrolled in NYC public schools in 2015-2016. Students served in Alternate Learning Centers (District 88) and in a grade below Kindergarten were excluded from analyses (N = 1,067,653).

Figure 2: Figure includes all active students over age five enrolled in NYC public schools in 2015-2016 who had an IEP classification. Students served in Alternate Learning Centers (District 88) and in a grade below Kindergarten were excluded from analyses (N = 211,425). Disability type Ns include: Autism = 15,553; Emotional Disturbance = 13,396; Intellectual Disability = 7,111; Learning Disability = 84,101; Other Health Impairment = 17,759; Speech or Language Impairment = 67,023; All Other IEP Classifications = 6,482.

Figure 3: Figure includes all active students over age five enrolled in NYC public schools in 2015-2016 who had an IEP classification. Students served in Alternate Learning Centers (District 88) and in a grade below Kindergarten were excluded from analyses (N = 211,425). Girls with disabilities N = 71,256; Boys with disabilities N = 140,169.

Figure 4: Figure includes all active students over age five enrolled in NYC public schools in 2015-2016 who had an IEP classification. Students served in Alternate Learning Centers (District 88) and in a grade below Kindergarten were excluded from analyses (N = 211,425). The pink slice in the center graph represents students who identify as another race/ethnicity group, including American Indian or Alaskan Native, Native Hawaiian or other Pacific Islander, and multi-racial (N = 3,325).

Figure 5: Figure includes all active students over age five enrolled in NYC public schools in 2015-2016 who had an IEP classification and neighborhood income data. Students served in Alternate Learning Centers (District 88) and in a grade below Kindergarten were excluded from analyses (N = 194,771). Low income includes students living in census tracks where the median income is less than $40,800 for a family of 3 (N = 99,822); Middle Income includes students living in census tracks where the median income is between $40,801 and $65,520 for a family of 3 (N = 58,055); Moderate/High Income includes students living in census tracks where the median income is $65,251 or higher for a family of 3 (N = 36,894). 16,654 students with IEPs are missing neighborhood income data.

Figure 6: Data are shown for all active students age five and over with an IEP and census tract information in 2015-2016. Students served in Alternate Learning Centers (District 88) and in a grade below Kindergarten are excluded from all analyses (N = 194,820).

Figure 7: Figure includes all active students over age five enrolled in NYC public schools in 2015-2016 who had an IEP classification. Students served in Alternate Learning Centers (District 88) and in a grade below Kindergarten were excluded from analyses (N = 211,425). Districts 1-32 N = 170,735; District 75 N = 23,762; Charters N = 15,252. Not shown, D 79 N= 1,676.

Figure 8: Figure includes all active students over age five enrolled in NYC public schools in 2015-2016 who had an IEP classification and setting data. Students served in Alternate Learning Centers (District 88) and in a grade below Kindergarten were excluded from analyses (N = 196,115). Integrated Co-Teaching Services N = 91,057; Special Class N = 72,765; Special Education Teacher Support Services N = 32,260. Percents do not total 100 due to rounding.

Figure 9: Figure includes all active students over age five enrolled in NYC public schools in 2015-2016 who had an IEP classification and setting data. Students served in Alternate Learning Centers (District 88) and in a grade below Kindergarten were excluded from analyses (N = 196,115).

Figure 10: Figure includes all active students over age five enrolled in NYC public schools in 2015-2016 who had an IEP classification and neighborhood income data. Students served in Alternate Learning Centers (District 88) and in a grade below Kindergarten were excluded from analyses (N = 194,771). Low income includes students living in census tracks where the median income is less than $40,800 for a family of 3 (N = 99,822); Middle Income includes students living in census tracks where the median income is between $40,801 and $65,520 for a family of 3 (N = 58,055); Moderate/High Income includes students living in census tracks where the median income is $65,251 or higher for a family of 3 (N = 36,894).

Figure 11: Figure includes all active students enrolled in NYC public schools in 2015-2016 who had IEP setting and 2016 survey data. Students served in Alternate Learning Centers (District 88) were excluded from analyses (N = 60,695). Bars show the percent of students agreeing with all three statements: "students at this school treat each other with respect," "at this school students harass or bully other students" (reverse coded), and "students at this school include students with disabilities in all school activities". Special Class N = 14,529; ICT or SETSS N = 46,166.

Figure 12: Figure includes all active students over age five enrolled in NYC public schools in 2015-2016 who had an IEP classification and attendance data. Students served in Alternate Learning Centers (District 88) and in a grade below Kindergarten were excluded from analyses (N = 200,516). Autism N = 15,231; Emotional Disturbance N = 12,931; Intellectual Disability N = 7,052; Learning Disability N = 80,149; Other Health Impairment N = 16,621; Speech or Language Impairment N = 62,481; All Other IEP Classifications N = 6,051.

Figure 13: Figure includes all active students over age five enrolled in NYC public schools in 2015-2016 who had an IEP classification and suspension data. Students served in Alternate Learning Centers (District 88) and in a grade below Kindergarten were excluded from analyses (N = 211,425). Autism N = 51; Emotional Disturbance N = 1,636; Intellectual Disability N = 134; Learning Disability N = 4,289; Other Health Impairment N= 817; Speech or Language Impairment N = 907; All Other Classifications N = 86.

References

Carranza, R. (2018*). Moving Toward a More Equitable School System: Lessons Learned from My Listening Tour.* New York, NY: New York City Department of Education.

Coutinho, M. J., & Oswald, D. P. (2005). "State Variation in Gender Disproportionality in Special Education: Findings and Recommendations." *Remedial and Special Education*, *26*(1), 7-15.

Donovan, M. S., & Cross, C. T. (2002). *Minority Students in Special and Gifted Education.* Washington, D.C.: National Academy Press, National Research Council Committee on Minority Representation in Special Education.

Elder, T. E., Figlio, D. N., Imberman, S. A., & Persico, C. I. (2019). *School Segregation and Racial Gaps in Special Education Identification.* (No. w25829). National Bureau of Economic Research.

Fabelo, T., Thompson, M. D., Plotkin, M., Carmichael, D., Marchbanks, M. P., & Booth, E. A. (2011*). Breaking Schools' Rules: A Statewide Study of How School Discipline Relates to Students' Success and Juvenile Justice Involvement.* New York, NY: Council of State Governments Justice Center.

Farley, C. (2019). *Better Evidence for Better Schools: Insights from the First 10 Years of the Research Alliance for New York City Schools.* New York, NY: Research Alliance for New York City Schools.

Fish, R. E. (2019). "Standing Out and Sorting In: Exploring the Role of Racial Composition in Racial Disparities in Special Education." *American Educational Research Journal*, 0002831219847966.

Gilmour, A. F. (2018). "Has Inclusion Gone Too Far? Weighing its Effects on Students with Disabilities, their Peers, and Teachers." *Education Next, 18*(4), 8-17.

Gonen, Y. (2019). "Few Hearing Officers for NYC Special Education Cases." *The City.* Retrieved from https://thecity.nyc/2019/07/few-hearing-officers-for-nyc-special-education-cases.html

Government Accountability Office (2019). "Special Education: Varied State Criteria May Contribute to Differences in Percentages of Children Served." Retrieved from: https://www.gao.gov/assets/700/698430.pdf.

Hehir, T., Grindal, T., Freeman, B., Lamoreau, R., Borquaye, Y., & Burke, S. (2016). *A Summary of the Evidence on Inclusive Education.* São Paulo, Brazil: Alana Institute.

Kraft, M., W. Marinell, & D. Yee (2016). *Schools As Organizations: Examining School Climate, Teacher Turnover, and Student Achievement in NYC.* New York, NY: Research Alliance for New York City Schools.

Liptak, G. S., Benzoni, L. B., Mruzek, D. W., Nolan, K. W., Thingvoll, M. A., Wade, C. M., & Fryer, G. E. (2008). "Disparities in Diagnosis and Access to Health Services for Children with Autism: Data from the National Survey of Children's Health." *Journal of Developmental & Behavioral Pediatrics,* 29(3), 152-160.

Morgan, P. L., Farkas, G., Hillemeier, M. M., Mattison, R., Maczuga, S., Li, H., & Cook, M. (2015). "Minorities are Disproportionately Underrepresented in Special Education: Longitudinal Evidence Across Five Disability Conditions." *Educational Researcher*, 44(5), 278-292.

National Council on Disability (2018). "IDEA Series: The Segregation of Students with Disabilities." Retrieved from: https://ncd.gov/sites/default/files/NCD_Segregation-SWD_508.pdf.

National Education Association (2008). *Disproportionality: Inappropriate Identification of Culturally and Linguistically Diverse Children.* Washington, D.C: NEA Center for Great Public Schools. Retrieved from: http://www.nea.org/assets/docs/HE/mf_PB02_Disproportionality.pdf.

National Research Council (2002). *Minority Students in Special and Gifted Education.* Washington, D.C: National Academies Press.

New York City Department of Education (2017). "NYC Department of Education: SESIS Assessment Report." Retrieved from: https://drive.google.com/file/d/0BxrKdaoARx08WXJxRS0zTTZHVU0/view.

New York City Department of Education (2018). "NYC Department of Education Annual Special Education Data Report: School Year 2017–2018." Retrieved from: https://drive.google.com/file/d/1FlWLINlqzdm1_Ypw6WJ_HYyBNtJJqQvr/view.

Office of Special Education and Rehabilitative Services (2018). "40th Annual Report to Congress on the Implementation of the 'Individuals with Disabilities Education Act'." Retrieved from: https://www2.ed.gov/about/reports/annual/osep/2018/parts-b-c/40th-arc-for-idea.pdf.

Rhim, L.M. & Kothari, S. (2018). *Key Trends in Special Education in Charter Schools: A Secondary Analysis of the Civil Rights Data Collection.* New York, NY: National Center for Special Education in Charter Schools.

Skiba, R. J., Artiles, A. J., Kozleski, E. B., Losen, D. J., & Harry, E. G. (2016). "Risks and Consequences of Oversimplifying Educational Inequities: A Response to Morgan et al. (2015)." *Educational Researcher, 45*(3), 221-225.

US Department of Education (2010). "Thirty-Five Years of Progress in Education Children with Disabilities Through IDEA." Retrieved from: https://www2.ed.gov/about/offices/list/osers/idea35/history/index_pg10.html.

Vallas, R. (2009). "The Disproportionality Problem: The Overrepresentation of Black Students in Special Education and Recommendations for Reform." *Virginia Journal of Social Policy the Law*, 17(1),181-208.

Zimmerman, A. (2018). "Eighty percent of NYC schools aren't fully accessible to students with physical disabilities. Activists say $850 million could make a dent. *Chalkbeat.* Retrieved from: https://chalkbeat.org/posts/ny/2018/09/12/most-nyc-schools-are-not-fully-accessible-could-850-million-help/

Zimmerman, A. (2019). "Sayonara, SESIS: New York City to Scrap its Beleaguered Special Education Data System." *Chalkbeat.* Retrieved from: https://www.chalkbeat.org/posts/ny/2019/02/22/sesis-special-education/.

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