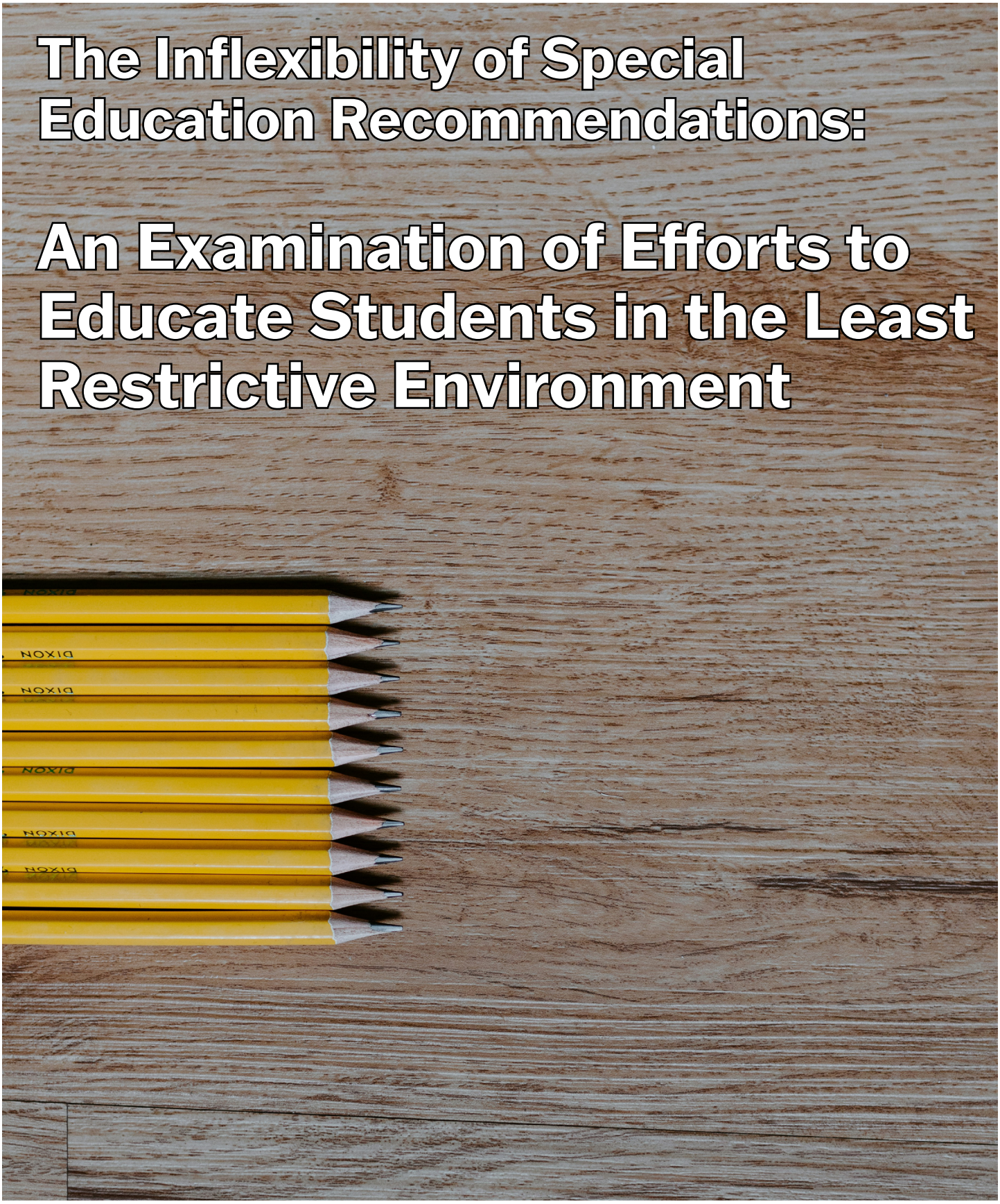
The Inflexibility of Special Education Recommendations:

An Examination of Efforts to Educate Students in the Least Restrictive Environment



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Introduction

Calls for reforming special education in New York City schools have spanned close to five decades. Special Education involves the provision of individually designed educational programming intended to meet the needs of students with disabilities—programming that is spelled out in each student's Individualized Education Program (IEP), which the Department of Education is mandated to provide. The federal Individuals with Disabilities Education Act (IDEA), enacted in 1975, and most recently reauthorized in 2004, stipulates that all students with a qualifying disability receive a free appropriate public education in the "least restrictive environment," which means that a child with a disability should be educated with peers without disabilities to the maximum extent appropriate.[1] The importance of maximizing time spent with peers without disabilities stems from early education laws created to prevent exclusion and instead allows students with disabilities access to curriculum that is as similar as possible to their peers without disabilities, and facilitates their socialization during extra-curricular activities such as during gym and in hallways. This study examines the extent to which elementary students with disabilities are recommended for more inclusive settings with their peers without disabilities in the city's traditional public schools. It also considers factors associated with any changes in recommendations over time.

Special Education is a highly complex system that requires a large commitment of resources. IDEA recognizes thirteen disability classifications encompassing intellectual, emotional, and physical challenges. NYC's Department of Education (DOE) will spend more than $6 billion this year to provide Special Education services, 21 percent of the city's education budget. About 22 percent of students in grades K-12 enrolled in the city's traditional public schools had an IEP in school year 2020-2021 compared with the national average of 14 percent.[2] Students with disabilities in New York City attend four types of schools: traditional or community school district public schools; the city's specialized citywide special education district, generally referred to as District 75; charter schools; and non-public schools with the cost borne either directly or indirectly by the DOE.[3]

In 2023, New York City Public Schools convened a Special Education Advisory Council, whose final recommendations included strategies to better inform families of available programs and services within the City's schools. This advisory group builds upon citywide reforms taken by the Department of Education (DOE) over a decade ago that required schools to serve students with IEPs in their existing schools, rather than assign students to schools based on availability of services. The Shared Pathways reform (which motivated this study), introduced in 2010-2011 and expanded in 2012-2013, also incentivized the movement of students with disabilities out of self-contained classrooms that only serve students with IEPs and into more inclusive settings. Inclusive settings include general education classrooms where students with disabilities can receive supplementary supports and integrated co-teaching classrooms (ICT), where students with disabilities and their peers without disabilities are taught in the same classroom.[4] The city's Department of Education has encouraged schools to program students with disabilities in a combination of settings based on their needs and strengths, maximizing time with their peers without disabilities.

Recent discussions concerning special education in the city have concentrated on the provision of services—with concerns about whether students are receiving services for which they are mandated and according to the timelines specified in the law.[5] But there are equally critical questions about the factors that influence programming recommendations—including how schools make plans to fulfill the services outlined in their students' IEPs, how schools monitor and assess the progress of their students with IEPs, and whether and the extent to which schools consider a student's least restrictive environment in this process. Additionally, there are questions about how students are considered for special education services in the first place. In fact, several large evaluations conducted over the past three decades in the city have noted that a key to improving special education resides in general education itself.[6] General education has been historically conceived as the opposite of special education—a one-size fits all standard curricula without specialized instruction.

This mixed-methods study investigates how elementary school teams grapple with operationalizing an appropriate education in the least restrictive environment for their students. IBO attempts to link school-based discussions at a small sample of elementary schools with broader citywide data on elementary students with IEPs. IBO observed school-based discussions about students identified as struggling and for consideration of special education evaluation referrals as well as discussions about programming concerning students already receiving special education services. IBO also tracked programming recommendations for elementary students with IEPs across all D1-32 schools over several years to observe any changes. Ultimately, this study explores whether the factors a small sample of school teams considered when discussing programming options help explain how schools determine programming recommendations in the least restrictive environment for students with disabilities over time.

It is important to note that this study uses multiple time points. At the time of meeting observations in school year 2017-2018, the most recent citywide Department of Education data IBO had access to was 2016-2017. This report was scheduled for release in spring of 2020 and then delayed due to the pandemic. In the meantime, IBO has updated the analyses with data from 2020-2021 (with additional tracking of the initial sample of students through 2018-2019) and shows similar findings.

This report is organized as follows:

- **Section 1** outlines the data used for this mixed-methods study as well as IBO's methodology for collecting and analyzing the data.

- **Section 2** describes the landscape of elementary school students with IEPs using data from the third year at which IBO tracks students, the 2016-2017 school year. IBO presents the likelihood of having an IEP for student groups with different demographic characteristics such as race, gender, English Language Learner status, poverty and housing, and borough of enrollment. Additionally, IBO provides data on the distribution of disability classifications for students with IEPs. While the share of elementary students with IEPs has increased since then, the demographic trends in terms of likelihood of having an IEP for elementary school students in the 2018-2019 school year are similar.

- **Section 3** reports on how IBO analyzes the educational setting recommended. IBO focuses on the most frequent setting, as students can be recommended for multiple and different types of settings depending on their need for support. IBO also pays particular attention to students' inclusion in general education classrooms (and by proxy time with their peers without disabilities) for any instructional part of their day.

- **Section 4** provides the qualitative dimension to the study, observing how a small number of elementary school teams discuss everything from options for students identified as struggling, which may include referrals for special education evaluations, to programming options for students with an IEP, providing insight into the underlying structures and processes at the school that influence these discussions.

  IBO looks at the pre-referral process, paying particular attention to the factors that guide school teams when they are considering a special education evaluation for general education students identified as struggling. IBO asks what interventions school teams use to assist these students and how the results of these interventions are assessed prior to a referral for a special education evaluation.

  For students with IEPs, IBO investigates whether and how teams consider a student's progress in their current programming, and whether and how teams consider inclusion as an option as they are

preparing for upcoming IEP meetings. IBO identifies factors considered by a sample of school teams as they engaged in the strategic planning necessary to ensure their school community aligns programs and services in the least restrictive environment with the needs of their students with disabilities.

- **Section 5** returns to IBO's quantitative data citywide on all students with IEPs and investigates any changes in setting recommendations as IBO tracks the sample of elementary school students with IEPs across three years. IBO examines how often changes in setting recommendations for individual students occur in terms of students' most frequent setting. Particular attention is paid to students moving into and out of self-contained classrooms, which are used as a proxy for a more restrictive environment.

- **Section 6** tracks IBO's sample of students with IEPs for an additional two more years until 2018-2019, through the last full school year before the COVID-19 pandemic hit. Due to disruptions in how students were served during the shutdown in spring 2020 and the option to attend school either fully remote, hybrid, or fully in-person in 2020-2021, IBO looked at programming through 2018-2019. By this time, almost all students have changed schools, so this analysis is focused on what happens when students change schools in terms of IBO's measure of least restrictive environment rather than a reflection of considerations taking place during team meetings while students are in the same school.

Section 1: Data and Methodology

The goal of this study is to understand the extent to which elementary students with disabilities are recommended to have access to more inclusive settings and to their peers without disabilities in the city's traditional public schools. Qualitative data were collected during seven months beginning October 2017 and ending April 2018. Over that period, the study's principal investigator observed roughly 30 meetings across six public elementary schools and conducted follow up informal interviews with school staff involved in the meetings. Schools were selected randomly, and participation was voluntary. Observations of school Pupil Personnel Team (PPT) meetings shed light on the types of discussions teams have about interventions attempted before a referral for an initial special education evaluation—namely those interventions that would allow a student to succeed in the general education setting. Observations of School Implementation Team (SIT) meetings reveal how school clinicians and educators brainstorm options for their students with IEPs, as they prepare for upcoming IEP meetings with parents to jointly make determinations regarding next steps in the child's education. It is important to note that SIT meetings are *not* IEP meetings where determinations are made, but instead provide a forum in which school teams discuss concerns about access and quality for all their students with IEPs. Ultimately, both types of meetings give insight into the kinds of discussions schools have about students who have been identified as having academic and/or behavioral concerns. These discussions also illuminate the larger structures and processes that are in place at the school level as staff contemplate how to best provide struggling students with an appropriate education in the least restrictive environment. Additional information regarding IBO's qualitative sampling and meeting observations are included in the Appendix.

Quantitative data for students with IEPs were provided by the DOE through the Special Education Student Information System (SESIS), which identifies students with IEPs in each year by their disability classification. Note that IBO utilized SESIS for data on recommendations, as opposed to data on the actual provision of programs and services.[7]

Using these data, IBO created two main datasets used for the quantitative analysis. First, IBO created a snapshot of students attending D1-32 schools that serve students in grades K-5 in school year 2016-2017; this sample does not include students in pre-Kindergarten. It also excludes K-5 students enrolled in District 75 programs, private or charter schools, or home or hospital settings. Subsequently, IBO tracked students through the SESIS data for three years—from 2014-2015 through 2016-2017—to assess if and in what way students' programming recommendations change across years. See the Appendix for notes on the quantitative methodology and tables of findings from the logistic regressions. The study is further enhanced by the inclusion of additional data in years 2017-2018 and 2018-2019.

Study Design and Limitations

IBO sought to integrate qualitative and quantitative data to enhance understanding of how New York City school teams decide whether to refer students for special education evaluations and, in cases where students are referred for special education services, how school teams consider programming in the least restrictive environment. IBO drew a random sample of schools to invite into the study (see Appendix) but was only able to gather information from those schools that agreed to participate. It was especially difficult to recruit schools with relatively few students with IEPs. IBO did not observe IEP meetings where staff and parents make final programming decisions. IBO's quantitative data from SESIS reflect recommended services; the data do not provide a record of actual services delivered.

New York City public schools are currently operating in their third year in-person after the Covid-19 pandemic. While this study cannot illuminate current school teams discussions regarding struggling students and

students with IEPs, the findings can inform the ongoing challenges school teams face in meeting their students' dynamic needs—some of which may have been exacerbated in the aftermath of the pandemic.

Section 2: Landscape of NYC Elementary School Students with Individualized Education Programs, 2016-2017

Among IBO's sample of more than 360,000 K-5 students who attended 593 different elementary schools, 17.6 percent of students had an IEP, though particular demographic groups of students are more likely to be identified as needing an IEP than others. Within each student demographic group, IBO calculated an IEP rate—the share of students within each demographic group that has an IEP. IBO looks at differences across the following student characteristics: race, gender, English Language Learner status, neighborhood poverty designation, housing status, and borough of enrollment. Hispanic and Black students, males, English Language Learners, students from low-income neighborhoods, and students attending schools in Staten Island all had IEP rates of approximately 20 percent.

Figure 1
More Than 17 Percent of Elementary School Students Had an IEP in 2016-2017, With Differences by Demographic Group

	All Students	Students with IEPs	IEP Rate
Race			
White	58,958	9,192	15.60%
Asian	65,647	5,286	8.10%
Black	75,300	14,988	19.90%
Hispanic	152,030	32,731	21.50%
Other	8,485	1,110	13.10%
Gender			
Female	175,931	21,131	12.00%
Male	184,489	42,176	22.90%
English Language Learner Status			
Non-English Language Learner	289,446	49,093	17.00%
English Language Learner	70,974	14,214	20.00%
Neighborhood Poverty Designation			
Student Not from Low-Income Neighborhood	269,311	44,032	16.30%
Student from Low-Income Neighborhood	84,491	18,030	21.30%
Housing Status			
Not Temporary Housing	318,353	55,314	17.40%
Temporary Housing	42,067	7,993	19.00%
Borough of School Enrollment			
Manhattan	38,656	7,219	18.70%
Bronx	82,039	15,941	19.40%
Brooklyn	109,260	18,444	16.90%
Queens	104,413	15,539	14.90%
Staten Island	26,052	6,164	23.70%
Total	**360,420**	**63,307**	**17.60%**

SOURCE: IBO Analysis of DOE Data, School Year 2016-2017
NOTE: Elementary school students in districts 1-32 only. Students enrolled in Pre-K and those attending D75 schools, D79 programs, and charter schools are excluded. Other includes Multi-Racial, Native American, and students with missing ethnicity information. IBO's measure of students from low-income neighborhoods is based on median family income in census tract where student resides, and IBO's threshold for low-income is based on the New York City Mayor's Office for Economic Opportunity threshold. Incomplete data prevented us from calculating neighborhood income level for 6,624 students.

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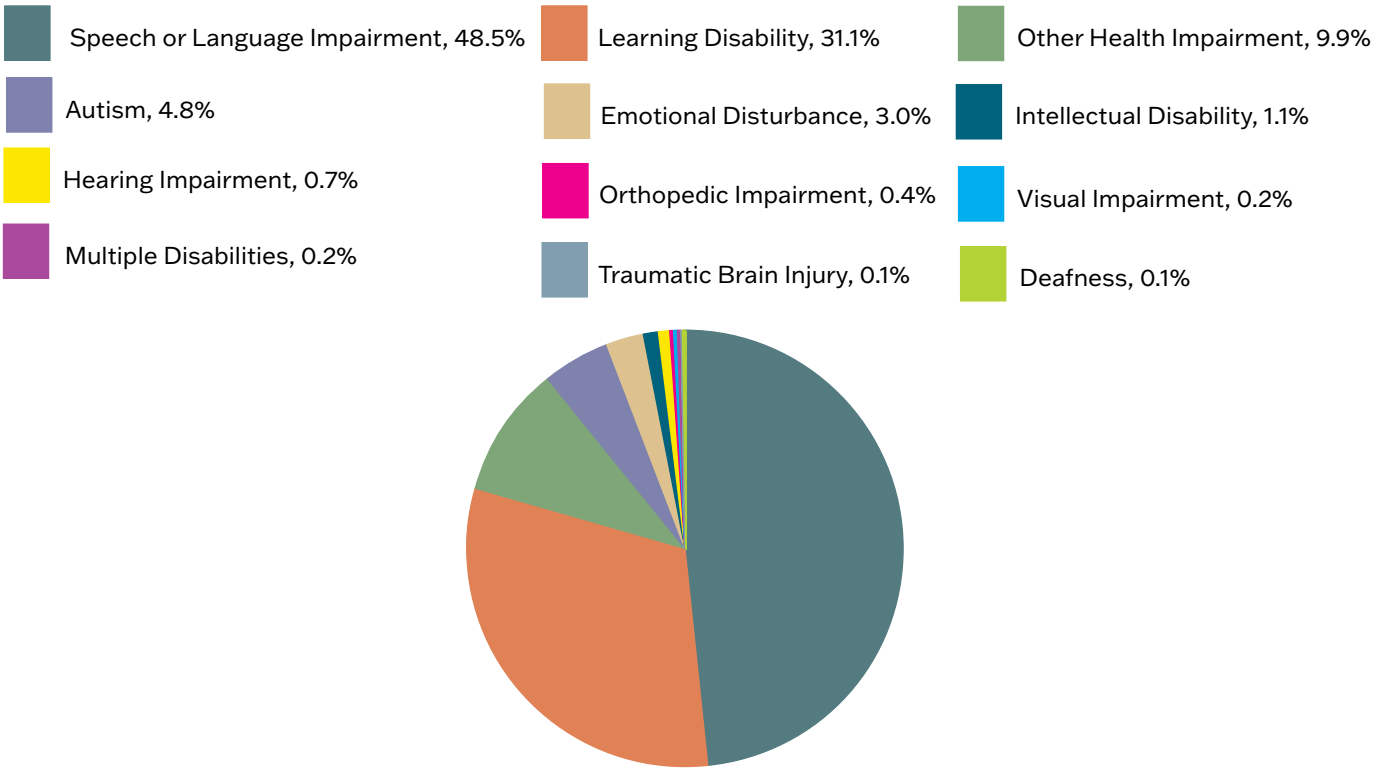
Figure 2
Nearly Half of Elementary School Students with IEPs in 2016-2017 Were Classified with Speech or Language Impairment



SOURCE: IBO analysis of Special Education Student Information System (SESIS) data

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Based on the 13 categories of disabilities defined under the federal IDEA, by far the largest share of the over 63,000 students in the study with IEPs (48.5 percent) were classified as having speech or language impairments. The next largest category, learning disability, made up 31.1 percent of students with IEPs. Taken together, six categories account for over 98 of students' classifications: speech or language impairment; learning disability; other health impairment; autism; emotional disturbance; and intellectual disability. Please note that effective July 27, 2022, the Board of Regents for New York official changed the term "emotional disturbance," which has been criticized to be stigmatizing for children, to "emotional disability."[8] IBO uses the term "emotional disturbance" in this report as it was still in use during the years of this analysis. These findings are similar for the sample of elementary school students in 2018-2019, though the population of students classified with Autism significantly increased to 8.0 percent, those classified with speech or language impairment increased to 51.8 percent, while those classified with learning disability decreased to 26.4 percent.

Categories of Disabilities Under Federal Law

Autism is a developmental disorder that affects children's communication, socialization and behavior.

Deaf Blindness. Children with a diagnosis of deaf-blindness have both hearing and visual impairments.

Deafness describes children with a severe hearing impairment.

Emotional Disturbance has been described as "conditions that adversely affects performance that cannot be explained by intellectual, sensory, or health factors, inability to build satisfactory relationships with adults or peers, inappropriate behaviors, general unhappiness and depression." (American Academy of Special Education Professionals, n.d.)

Hearing Impairment refers to a hearing loss not covered by the definition of deafness. This type of loss can change or fluctuate over time.

Intellectual Disability is characterized by below average cognitive functioning and adaptive behaviors. Down syndrome is one example of an intellectual disability.

Learning Disability is a disorder of one or more of the basic psychological processes involved in understanding or in using language, spoken or written. Some examples include dyslexia, dysgraphia, dyscalculia, auditory processing disorder, or non-verbal learning disability.

Multiple Disabilities means a child has more than one condition covered by IDEA.

Orthopedic Impairment to a child's body, no matter the cause, is considered a disability.

Other Health Impairment spans a wide array of conditions such as heart conditions, sickle cell anemia, cancer, as well as attention deficit disorder, and attention deficit and hyperactivity disorder.

Speech or Language Impairment covers a number of communication challenges, including stuttering, impaired articulation, language deficiency, language processing, and voice impairment.

Traumatic Brain Injury is an acquired injury to the brain, usually the result of an accident or physical force. Term does not apply to injuries that are congenital or degenerative, or those induced by birth trauma.

Visual Impairment includes both partial sight and blindness.

Section 3:
How Are Students with Disabilities Served?
Most Frequent Recommended Setting

Students with IEPs attending traditional public schools can be recommended for the following kinds of settings: general education classrooms with related services or Special Education Teacher Support Services (SETSS); Integrated Co-Teaching classrooms (ICT); and self-contained classrooms. IBO created different metrics to measure the degree to which students with IEPs are recommended to have access to a less restrictive environment. The first metric is the setting that students are recommended to be in most frequently (the largest number of periods out of the week). The second metric is the degree to which students are recommended for flexible programming—settings can be offered for all or part of the school day, and students can be recommended to receive different supports, in different settings, in different content areas depending on their individual strengths and needs. Third, IBO looked at students who are recommended an IEP paraprofessional, either within self-contained classrooms or more inclusive settings. Schools can use both flexible programming and paraprofessionals to increase their students' access to less restrictive environments.

In the Special Education Standard Operations Procedural Manual, the City's education department provides overarching guidance in how to educate children with disabilities alongside their peers without disabilities to the maximum extent possible. The chart of the continuum of settings shows the range of possible settings offered by the department. At the top of the chart, representing the least restrictive environment, is general education, with either related services or special education teacher support services. [9, 10] Settings further down the chart become increasingly restrictive, with relatively less time spent with peers without disabilities.

DOE has noted that all settings are part of the same system, and that flexible programming allows students to participate in any combination of special education services and programs throughout the day and week, leaving it up to each school to determine and coordinate the programs and services based on their students' needs and strengths.

The Related Services category includes students who are participating in the general education setting and *only* receiving special education services such as speech/language, occupational or physical therapy, or counseling.

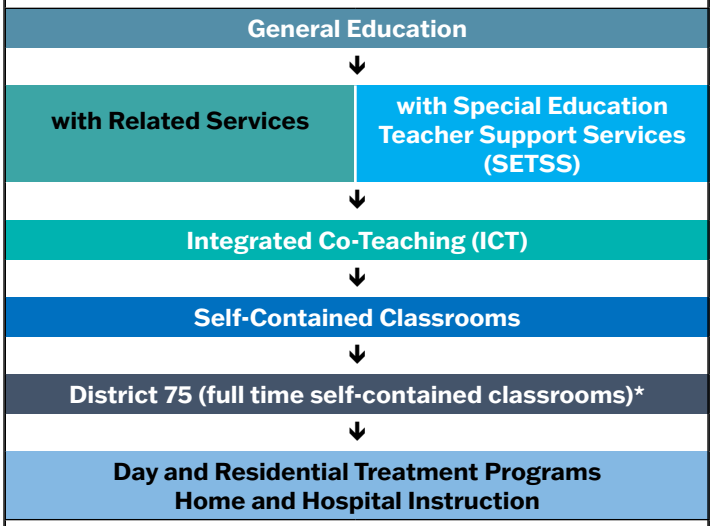
Students with Special Education Teacher Support Services (SETSS) receive specially designed direct instruction and/or supplementary instruction delivered by a special education teacher through individual and/or group instruction (with a maximum size of eight for elementary school students) either within or outside the general education classroom.

Integrated Co-Teaching (ICT) classes consist of one general education certified teacher and one special education certified teacher, providing a lower student-to-teacher ratio. In New York City, the DOE recommends that approximately 60 percent of an ICT class be general education and 40 percent special education with a maximum of 12 students with an IEP.

Students in self-contained classrooms receive instruction with their peers with IEPs, often with a paraprofessional assisting (with a student-to-teacher-to-paraprofessional ratio of 12:1:1). There are also self-contained classrooms with a student-to-teacher ratio of 12:1 at the elementary and middle school level.

Self-contained classrooms in D1-32 schools, while restrictive, are less so than the self-contained classrooms in the citywide District 75 program or those programs in a New York State Education approved non-public school such as a day and residential program or home and hospital instruction.[11] While IBO focuses on elementary school students attending D1-32 schools in this report—and team meetings largely refer to general education, ICT, and self-contained classrooms when discussing settings—we make note when District 75 programs also come up in discussions. Finally, day and residential treatment programs include psychiatric care within an educational program; these programs may be hospital-based, school-based, or located in a community site and are licensed by the New York State Office of Mental Health.

Figure 3
Continuum of Settings From Least Restrictive to Most Restrictive



NOTE: A small number of students attending District 75 programs can be selected to participate in inclusion programs, receiving special education supports and services in a District 1-32 school. These students were excluded from this study.
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Most Frequent Setting

IBO identified the most frequent setting recommendation for elementary school students with IEPs in school year 2016-2017. Examining

Figure 4
Nearly 43 Percent of Elementary Students with IEPs in 2016-2017 Were Most Frequently Recommended for an Integrated Co-Teaching Classroom Setting

		Most Frequent Setting Recommendation				
Classification	N	Related Services Only	Special Education Teacher Support Services	Integrated Co-Teaching	Self-Contained	Total
Speech or Language Impairment	30,673	19.9%	9.0%	43.5%	27.6%	100.0%
Learning Disability	19,714	5.9%	20.1%	45.0%	28.9%	100.0%
Other Health Impairment	6,258	21.9%	10.6%	43.2%	24.4%	100.0%
Autism	3,031	8.1%	1.7%	39.1%	51.0%	100.0%
Emotional Disturbance	1,904	17.8%	5.8%	26.2%	50.3%	100.0%
Intellectual Disability	665	4.5%	0.8%	5.4%	89.3%	100.0%
All Other Classifications	972	29.0%	6.5%	30.5%	34.1%	100.0%
All Classifications	63,217	15.1%	12.0%	42.6%	30.3%	100.0%

SOURCE: IBO analysis of DOE data, school year 2016-2017
NOTE: Elementary school students in districts 1-32 only. Analysis excludes 90 students whose most frequent setting was adaptive physical education. Analysis does not break out differences for students classified with Autism in specialized ICT programs (NEST programs, a group of specialized programs).
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students' most frequent setting across all disability classifications, we found that the largest share of students with IEPs, 43 percent, were most frequently recommended for ICT classrooms; another 30 percent were most frequently recommended for self-contained classrooms. The remaining 27 percent were recommended for general education classrooms with supplemental supports (related services only or SETSS) as their most frequent placement. There are noteworthy differences among the most frequent recommended settings, however, depending on a student's disability classification.

Integrated co-teaching classrooms were the most frequent setting recommendation for students classified with a Speech or Language Impairment (43.5 percent), a Learning Disability (45.0 percent), and an Other Health Impairment (43.2 percent). However, students classified with an Emotional Disturbance were nearly twice as likely to be recommended a self-contained classroom setting than an ICT classroom (50.3 percent compared with 26.2 percent) and close to 90 percent of students classified with Intellectual Disabilities were most frequently recommended self-contained classrooms. More than half of students classified with Autism were recommended a self-contained classroom while 39.1 percent were recommended an ICT classroom as their most frequent settings. These findings are consistent with national data showing students classified with Autism, Emotional Disturbance, and Intellectual Disabilities—classifications often associated with behavioral challenges—are excluded from more inclusive classrooms at higher rates than their peers with other disabilities classifications.[12] These three disability classifications tend to be associated with behavioral challenges that can impact learning in ways which are discussed below.

A general education classroom setting with related services only—the least restrictive environment on the continuum—was the most frequent setting recommendation for 15.1 percent of all students with IEPs, but it was more likely to be recommended for those students classified with Other Health Impairment (21.9 percent), Speech or Language Impairment (19.9%), and Emotional Disturbance (17.8 percent), and All Other Classifications (29.0 percent). A general education classroom setting with SETSS was the most frequent setting recommendation for 12.0 percent of students with IEPs, but it was more likely to be recommended for students classified with a Learning Disability (20.1 percent).

Figure 5
Flexible Programming/Multiple Settings Were Observed for Fewer Than Five Percent of Elementary School Students with an IEP in 2016-2017

Recommended Settings	Number	Percent
Students in Only ONE Program:		
Integrated Co-Teaching ONLY	24,787	46.2
Self-Contained ONLY	18,473	34.4
Special Education Teacher Support Services ONLY	7,550	14.1
TOTAL in Only ONE program	**50,810**	**94.7**
Students in MULTIPLE Programs:		
Integrated Co-Teaching & Special Education Teacher Support Services	2,098	3.9
Integrated Co-Teaching & Self-Contained	386	0.7
Self-Contained & Special Education Teacher Support Services	336	0.6
Integrated Co-Teaching & Self-Contained & Special Education Teacher Support Services	11	0.0
TOTAL in MULTIPLE Programs	**2,831**	**5.3**
TOTAL	**53,641**	**100.0**

SOURCE: IBO analysis of DOE data, school year 2016-2017
NOTE: Elementary school students in districts 1-32 only. IBO excludes 66 students who are recommended programming other than settings reported here (adaptive physical education). IBO also excludes students with the recommendation for Related Services Only in General Education classroom, as that recommendation does not constitute a program or setting.
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Flexible Programming

In addition to looking at the most frequent setting for which students were recommended, IBO also looked at how often students were recommended to spend time in multiple settings. Flexible programming means that a student may be recommended for a combination of special education settings throughout the day and week. In theory, under this framework a student would not need to be recommended for self-contained classes for all instructional periods if that student only needed a more intensive level of support in one subject, such as math. That student could then be

recommended an ICT classroom setting for English, science, and social studies.

While the DOE has encouraged flexible programming that spans programs and settings (general education, ICT, and self-contained classrooms) and levels of restrictiveness, IBO found that in school year 2016-2017 about 95 percent of students in IBO's sample were recommended to be placedin only one setting. Roughly 34 percent of students within the sample were recommended self-contained programming only, a setting that separates students apart from their peers without disabilities. These findings prompted questions about what deters flexible programming—a question IBO explores in the qualitative portion of this study.

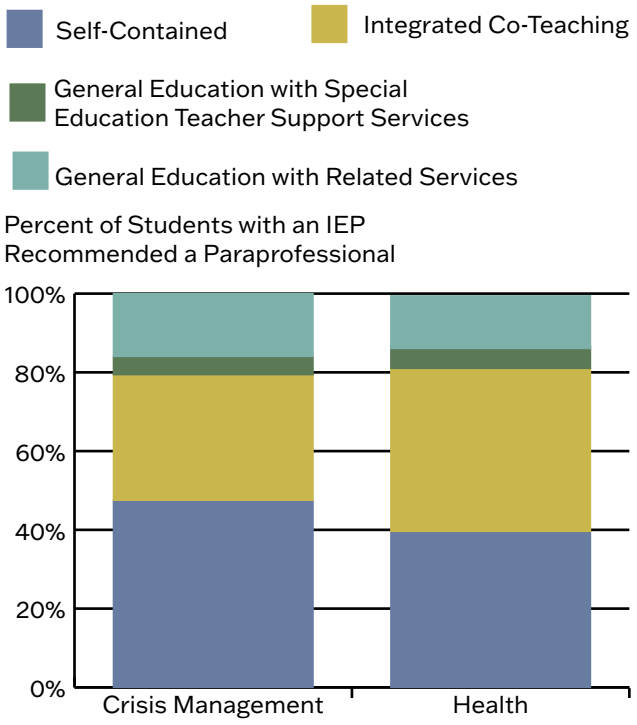
Just 4.5 percent of all elementary school students with IEPs were recommended for multiple settings or flexible programming, with nearly three-quarters of them recommended for Special Education Teacher Support Services in an ICT classroom setting. Relatively few students were recommended both ICT and self-contained classrooms or SETSS in a self-contained classroom.

IEP Paraprofessionals

There are other ways that schools can assist students to access a more inclusive setting including the aid of a paraprofessional. Since the inception of the Individuals with Disabilities Education Act, school districts have been required to teach students not only academic subjects, but also broader life skills. Paraprofessionals can assist students in building functional skills as well as provide more supports so students can participate in classrooms alongside their peers without disabilities. Crisis management paraprofessionals facilitate students' self-regulation, anxiety management, and impulse control skills so that they can participate productively in classroom learning. Health paraprofessionals ensure students' health plans are followed, assist with the use of medical equipment, and work with nursing staff to provide a mixture of basic health care services such as first aid. For some students classified with developmental disabilities and other health impairments, paraprofessionals with other specialized training can aid students to use the bathroom, move safely throughout the building, or utilize transportation. While schools might use a paraprofessional as a mechanism to support inclusive education, some researchers have raised concerns about overreliance on their assistance, as well as about inadvertent detrimental effects for students with IEPs such as interference with peer interactions (Giangreco et. al, 2004, 2013[13]).

Figure 6

In the Majority of Cases Where Paraprofessionals Were Recommended for Elementary School Students in 2016-2017, Students Were in Inclusive Settings



SOURCE: IBO analysis of DOE paraprofessional data, school year 2016-2017
NOTE: Elementary school students in districts 1-32 only. Other Paraprofessional types include transportation, orientation and mobility, and toileting. Excludes students recommended a paraprofessional who are recommended programming other than settings reported here (adaptive physical education)

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In previous work, IBO studied the distribution of paraprofessionals among students with disabilities in DOE schools in school year 2015-2016 (unlike this study, that analysis was based on all DOE students, including those in high school). IBO found that students classified with Autism, Emotional Disturbance, and Other Health Impairments were more likely than other students with IEPs to be

recommended to receive services from a paraprofessional. IBO finds similar trends in recommendations for paraprofessionals among students with IEPs in this study's sample in school year 2016-2017. Just under 5,500 students, 9 percent of the sample, were recommended to have either an individual or group paraprofessional. Roughly 52 percent of these students were recommended to have a crisis management paraprofessional, and 42 percent were recommended to have a health paraprofessional. The remaining 6 percent of students were recommended one of three other types of paraprofessionals: Toileting, Orientation and Mobility, and Transportation.

IBO also reviewed the settings in which students are recommended paraprofessionals and in particular, the instances when paraprofessionals are recommended while students are simultaneously recommended more inclusive settings—ICT and general education classrooms. Of those students recommended to have a crisis management paraprofessional assigned, 47.5 percent were recommended to have one in self-contained settings, 31.8 percent in Integrated Co-Teaching classrooms, and 20.5 percent in general education classrooms. Of those students whose recommended services included a health paraprofessional, 38.7 percent were recommended one in self-contained classrooms, 40.4 percent in ICT classrooms, and 19.6 percent in general education classrooms. IBO revisits recommendations for paraprofessionals in the qualitative section of this study to understand whether and how schools consider them as an aide for an inclusion.

Section 4
A Look Inside School Team Discussions Concerning Students with Individualized Education Plans (IEPs) and Students Identified for Special Education Referrals

Across six months (October 2017-April 2018) this study's principal investigator observed 32 PPT and SIT meetings in six schools. IBO's goal was to observe the factors that school teams weigh in their discussions of meeting the needs of individual students identified as struggling and how teams discussed issues of access to programming. In particular, IBO observed whether and how schools defined and discussed the least restrictive environment. IBO did not seek permission to observe IEP meetings, where program recommendations for students are executed with parent/guardian consent.

Summary and Main Findings

- The small number of DOE elementary schools that participated in this study regularly convened teams to discuss students identified as struggling with academic, behavioral, and/or other challenges (Pupil Personnel Teams) and to review special education programming and resources that best meet the needs for current students with IEPs (School Implementation Teams).

- While the PPTs are a commonly used structure for schools to discuss specific student struggles and to consider special education referrals, they were implemented differently across the school team meetings IBO observed. There was tremendous variation in PPT meetings, especially in how teams discussed any interventions attempted for students identified as struggling prior to making a referral for an evaluation for special education services.

- Programming availability for students was often discussed at SIT meetings, including maximum and minimum seats available in grade-level classrooms. If restrictiveness of settings came up in discussions, the teams observed were more likely to consider more restrictive environments—self-contained classrooms and district 75 settings.

- School team discussions were shaped by the process of the meetings (staff attendance, use of protocols, etc.) as well as by the larger efficacy of special education and general education structures at the school. A lack of interventions on the general education side can correspond with an increase in referrals on the special education side.

It is important to note that the meetings observed were not representative of all or final determinations concerning students receiving special education services or students being considered for a special education evaluation. For example, some requests for special education evaluations go directly to an administrator or to the school psychologist and do not emerge in PPT meetings. Similarly, SIT meetings were not exhaustive of all discussions concerning students with IEPs.

The Function of Pupil Personnel Teams, IEP Teams, and School Implementation Teams

The Pupil Personnel Team (PPT) is an interdisciplinary staff group that discusses students who have been identified as struggling with academics, behavior, or other issues. The team analyzes data as it relates to the specific areas of struggle for each student; identifies, implements, and assesses interventions to mitigate those struggles; and ensures that sufficient consideration has been given to alternatives to special education. Academic intervention services (AIS), response to intervention (RTI), and remedial instruction are preventative methods designed to help students who are struggling with a skill or lesson; because they

are not themselves considered special education services, they do not require an IEP. In this report, IBO pays particular attention to RTI, which is designed to decrease referrals for special education evaluations by increasing the quality of instruction, providing additional levels of support, and monitoring student progress. Teams, however, are advised that considering alternatives should not delay also obtaining parental consent, which is needed if it is subsequently determined that an initial evaluation ("initial referral") for special education is warranted. The initial referral is made to the student's school IEP team, which includes parents and school personnel, and is the first step towards receiving special education services.[14]

While PPTs can make recommendations for an initial referral, certain other authorized individuals can as well, including the student's parent or guardian, the principal of the student's school, the school psychologist, or the chairperson of the school's IEP team.[15] Consent must be obtained from the student's parent or guardian before any assessments, including formal observations, can be conducted. Although the PPT or other authorized individuals can make an initial referral for a special education evaluation, it is the IEP team that determines whether a student is eligible for special education services.

The Individualized Education Program memorializes the team's determinations (typically at the IEP meeting) regarding the student's eligibility for special education, their present levels of performance, individual needs, annual goals, and recommended programming and/or related services in the least restrictive environment. The IEP team is mandated to annually review each child's IEP and progress to identify whether any modifications are needed; a more comprehensive review occurs every three years (the "triennial" meeting).

In school year 2015-2016, the Department introduced the School Implementation Team (SIT), a new special education structure charged with analyzing the overall instructional and programming needs for students with disabilities as well as making strategic decisions about how to deploy resources (budget, staff, and space) to serve all students in accordance with their IEPs. In school year 2017-2018, the DOE issued a set of guidelines for SIT teams outlining how they are to work with other school-based teams to ensure coherent implementation of special education services. It was left up to each school to decide whether to combine the school implementation and pupil personnel team meetings or hold separate meetings for each team. According to the DOE guidelines, the SIT was not meant to usurp the functions of the school-based IEP process. The SIT is more of a planning body, although, as part of their planning work, SIT teams read IEPs to understand how an individual student's needs and services are outlined as well as to understand how to focus their energy to ensure students are meeting their IEP goals.

The Structures of Pupil Personnel Teams and School Implementation Teams

IBO first lays out the structure of PPT and SIT meetings, the composition of the staff members who attended them, and the focus of discussions observed in the following section. IBO then reports on the number of students discussed, the reasons named in discussion, as well as the issues that teams deliberated. Throughout the section IBO also reports on the data that teams reference in their discussions, specifically any data on interventions provided to ensure sufficient consideration is given to alternatives to special education, and for students with IEPs, any data on students' progress in special education.

- Staff composition in PPT and SIT meetings varied across schools but in many of the schools observed the same staff attended both meeting structures. Classroom teachers—both general education and special education—were typically not in attendance in either of these meetings. While teams cited the importance of principal participation, they generally did not attend.

- Protocols varied widely for PPT meetings while SIT meetings generally followed guidance provided by the DOE and were broader in scope. Schools that used a structured protocol in their meetings promoted broader participation in discussion and were able to focus on a smaller number of individual students and issues.

- Teams most often discussed availability of programming structures at the student's grade level (available seats in an ICT classroom per grade, as an example). The Least Restrictive Environment mandate was not debated; teams were more likely to value extra attention and support students could gain in a self-contained classroom (with a smaller class size and student-to-teacher ratio). Teams also considered setting appropriateness of D1-32 schools for students identified with more severe behavioral challenges.

Meeting Composition and Structure. Details on whether schools held PPT and SIT meetings separately or jointly, and the list of attendees by their title by school, as well as who took the role of meeting facilitator, provide some insight into how school teams organized their meetings and which voices were present or missing. Whether PPT and SIT meetings were held separately or together, the foci of the two were distinct. In PPT discussions, staff focused on individual students identified as struggling and at risk for referral for a special education evaluation. In contrast, students discussed at SIT meetings already had IEPs and

Figure 7
Staff Composition Similar for School PPT and SIT Meetings

	Number of Meetings Observed	PPT and/or SIT	Meeting Attendees		Meeting Facilitators
			PPT	SIT	
School 1	6	PPT and SIT separate	Assistant Principal; Special Education Liaison; Psychologist; IEP Teacher; Bilingual Psychologist; Guidance Counselor; Speech Therapist (2); Social Worker; Occupational Therapist (2); (Total: 11)		Guidance Counselor facilitated PPT; Psychologist facilitated SIT
School 2	5	PPT and SIT separate; sequential	Assistant Principal; Psychologist; IEP Teacher; Speech Therapist (2); Social Worker (Total: 6)		IEP Teacher & Psychologist facilitated both meetings
School 3	6	PPT and SIT separate	Assistant Principal; General Education Teacher; Special Education Coordinator; SETSS provider; AIS/RTI Specialist; Social Worker; CBO partner; (Total: 7)	Special Education Coordinator; IEP Teacher; SETSS providers (2); AIS/ RTI Specialist (Total: 5)	PT held on each grade. General Education Teacher presented; structured protocol facilitated by Social Worker. Special Education Coordinator facilitated SIT.
School 4	5	PPT and SIT combined	Assistant Principal (2); General Education Teacher; IEP Teacher; Literacy Coach; Psychologist; Speech Therapist; Occupational Therapist; Social Worker; Art Therapist (Total: 10)		General Education Teacher presented; structured protocol facilitated by Assistant Principal. SIT team meeting continued after General Education Teachers left.
School 5	5	PPT and SIT separate; sequential	Assistant Principal (2); Psychologist (2); IEP Teacher; Guidance Counselor (Total: 6)		IEP Teacher facilitated both meetings
School 6	5	PPT and SIT combined	Principal; Special Education Liaison; Psychologist; Bilingual Psychologist; IEP Teacher; Guidance Counselor; Social Worker (2); CBO Counselor (2); Family Worker (Total: 11)		Principal facilitated

SOURCE: IBO analysis of observations by principal investigator
NOTE: CBO refers to community-based organization.

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were receiving mandated services. As directed by the central office, the SIT also dedicated meeting time for reading a sampling of students' IEPs to assess their quality and to create school wide action plans to address any issues of access or quality. The SIT also discussed individual cases of students. Unlike the specific guidance provided for SIT teams, PPT teams had no such overarching direction from the DOE.

Between five and eleven staff members attended the PPT and SIT meetings. All six schools were consistent in having at least one administrator as well as out of classroom special education staff present. Non-classroom special education staff included the IEP teacher, a centrally funded position, recently repurposed as an interventionist to work with students in need of support; the school psychologist; and Special Education Teacher Support Services (SETSS) teachers. Related services providers were also present. Although every school invited the IEP teacher (an out of classroom staff member) to the meetings. No special education classroom teachers were present at the meetings.

General education teachers were also largely in absentia in the meetings. One school (School 4) invited general education teachers to their combined PPT/SIT meeting. Another school (School 3) invited the general education teacher to their PPT meeting. Other student support staff such as Response to Intervention and/or Academic Intervention Specialists (described below), Literacy Coaches, Guidance Counselors and Social Workers, and Art Therapists attended meetings in a couple of schools. Two of the schools (Schools 3 and 6) invited their community-based (CBO) partners. All teams assigned one facilitator, who distributed the meeting agenda, and took formal minutes.

PPT and SIT Teams Meeting Structure and Protocols Varied

As previously noted, IBO observed thirty-two meetings across six elementary schools. Meetings occurred monthly, during the school day, for the length of one classroom period (even if PPT and SIT meetings were combined into one). Four of the six schools held separate meetings, although two of the four schools held these separate meetings sequentially, with the same staff present. The two remaining schools (Schools 1 and 3) combined their PPT and SIT meetings.

PPT meetings were entirely dedicated to discussing individual students, but protocols varied widely by school. Two of the six schools (Schools 3 and 4) invited general education teachers to the PPT meeting. These same two schools followed a structured discussion protocol: the classroom teacher first presented specific issues of concern about one of their students, identifying areas of needs and strengths. The team then opened a larger discussion—this time with the classroom teacher responding to questions from the entire team present and sometimes just listening, as colleagues attempted to pinpoint more specific areas of struggle and brainstormed strategies for classroom teachers to further assist the student. In the remaining four schools, the facilitator opened the meeting and a general discussion of students listed on the meeting agenda followed. In the next section we provide a synthesis of specific discussions.

All schools that participated in the study had a PPT referral form, although no school team discussed these forms, or had the information on the forms in the meetings observed. At the request of the study investigator, all schools provided examples of their referral forms. The information on the forms varied widely. All included a section to indicate a specific reason for referral for special education. More detailed forms included a section to elaborate on the child's current academic performance, family stressors and general strengths and challenges. Only one school's form required a listing of interventions attempted to date.

In the SIT meetings, staff discussed current students with IEPs, including students new to the school, students coming up for an annual or triennial evaluation, and students for whom a concern about programming or services underway had emerged. Additionally, five of the six schools used one meeting to read a sample of student IEPs as directed by the central office to ensure the quality of the IEPs written. For this meeting, schools were aided with a comprehensive list of sixty questions (starting with the question:

"Is the language in the IEP current, objective, observable, jargon free and parent friendly?" and ending with the question: "Does this IEP reflect alignment across the present levels of performance, annual goals, and recommended programs and services?"). Lastly, schools used SIT meeting time to discuss school-wide strategies for supporting students with IEPs, as we will discuss in more detail. The scope of the SIT meetings was much broader than the PPT meetings.

While Academic Concerns Were the Primary Reasons for Initial Discussion of Elementary School Students Identified as Struggling, Behavioral Issues Dominated Team Discussions

This section provides an overview of the number of students identified for discussion by school, as well as IBO's categorization of the initial reason for the discussion. IBO presents data on the discussions of individual students in PPT and SIT meetings together, encompassing both those students identified as struggling and considered for referral for a special education evaluation and those students who already had IEPs.

- More than half of the students discussed in PPT and SIT meetings was identified as struggling primarily due to academic concerns. Nearly one-fifth of those students were English language learners, but staff were not always clear on whether the difficulties were attributable to language acquisition or other cognitive issues.
- Although behavior was cited as the initial reason for discussion just 20 percent of the time, behavioral issues dominated school team discussions. Socio-emotional hardships also confounded behavioral concerns.
- For a small number of students with behavioral concerns, teams discussed whether the D1-32 district school provided an "appropriate setting." In at least eight cases, school teams discussed District 75 as a more suitable setting for students they identified as having more intensive behavioral needs.

Across the 32 meetings observed, a total of 99 unique students were discussed. School teams brought up as many as 15 students per meeting. However, when teams deliberated either a student struggling in a general education classroom or a student's special education programming, teams focused on a fewer number of students, typically between two and five students per meeting. Meetings constituted one classroom period (45 to 50 minutes) even in cases where the PPT and SIT meetings were combined; thus, the average discussion for each student ranged from 5 minutes to 25 minutes.

IBO classified initial concerns raised in the PPT and SIT meetings into five categories: (1) academics; (2) behavior; (3) related services; (4) socio-emotional; and (5) setting appropriateness. Although students were most commonly identified for academic concerns, behavioral issues dominated team discussion time. Behavioral discussions were also intertwined with discussions about academics, setting appropriateness, and socio-emotional stresses. At times special education discussions were not necessarily about a disability. Instead, special education discussions could be a catch all for any student struggle. Additionally, both PPT and SIT meeting discussions surfaced multiple and overlapping areas of concern (as well as some additional ideas for support) but did not necessarily delineate steps to resolve them.

Academic: Fifty one percent of students were identified primarily for "academic" concerns: students who were behind grade level or were identified as needing additional assistance to engage with classroom material.

Teams regularly introduced contextual information for the students discussed, for example, noting if students were new to the school, had siblings or relatives who had similar challenges, were chronically absenteeism, or had been identified in previous years as struggling academically. Roughly 18 percent of students identified as having academic challenges were English Language Learners (ELLs). School teams in this sample were not always confident knowing if the academic difficulties experienced by these students were because of challenges in English language acquisition and development, language disorders, or other cognitive issues.

Figure 8
While Academic Concerns Were the Primary Reasons for Initial Discussion of Elementary School Students Identified as Struggling, Behavioral Issues Dominated Team Discussions

School	Number of Meetings Observed	Number Students Discussed	Initial Reason for Discussion
School 1	6	22 students	Academic: 8 Behavior: 9 Related Services Only: 3 Setting Appropriateness: 2
School 2	5 (only 4 discussed students)	18 students	Academic: 13 Behavior: 2 Related Services Only: 2 Setting Appropriateness: 1
School 3	6 (only 3 discussed students)	6 students	Academic: 3 Related Services Only: 1 Setting Appropriateness: 1 Socio-emotional: 1
School 4	5	18 students	Academic: 12 Behavior: 2 Related Services Only: 3 Socio-emotional: 1
School 5	5 (only 2 discussed students)	12 students	Academic: 8 Related Services Only: 3 Setting Appropriateness: 1
School 6	5	23 students	Academic: 6 Behavior: 7 Related Services Only: 1 Setting Appropriateness: 5 Socio-emotional: 4
Total	**32 meetings total 25 meetings where individual students were discussed**	**99 students**	**Academic: 50 Behavior: 20 Related Services: 13 Setting Appropriateness: 10 Socio-emotional: 6**

SOURCE: IBO analysis of observations by principal investigator

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There were some instances when school personnel, typically those bilingually trained, highlighted the unique needs of ELLs with disabilities. For example, the Psychologist in School 6 noted that ELL students could "get stuck in [English as a New Language] classroom methods" where instructional strategies for learning English are different than those used in special education classrooms for students having difficulty with processing content. In contrast, School 5's team reported that without bilingually trained personnel they had less understanding of the differences between language and cognitive difficulties and were less prepared to address the distinctive needs of their ELL students with disabilities.

Behavior: Twenty percent of students were identified primarily for "behavioral" concerns that were a distraction to their own or their classmates' learning and/or had behavioral concerns that teachers did not know how to address.

For behavioral concerns, schools deliberated how to best support students who had difficulty regulating their emotions or who struggled to focus on tasks. Teams expressed uncertainty about the root causes of behavioral concerns that emerged. Was the student acting out because they are struggling with academic content? Was the student acting out because they are bored with the content? Were there socio-emotional factors that are contributing to the student acting out? Behavioral cases could also run a wide range of concerns, at the more extreme end with students "tearing the school upside down" (Psychologist, School 2).

In each of the five categories there was a scale of less to more concern: in the behavior category, the scale ranged from "student can't sit still" to "student is a puncher."

Recall that students with behavioral issues were less likely to be recommended an inclusive setting than other students with IEPs (see Section 3, Most Frequent Setting section). In the meetings, staff across schools voiced unease over the limited number of strategies to address students' behavioral concerns or mitigate classroom disturbances. Specifically, in multiple schools, staff expressed a lack of confidence in Functional Behavioral Assessments (FBAs), the process for determining why a student engages in a particular behavior, and Behavioral Intervention Plans (BIPs), the intervention strategies used to prevent the occurrence of a troublesome behavior and to proactively teach alternative behaviors and provide positive supports. Some staff commented that schools needed more resources to implement FBAs and BIPs effectively. Others remarked that schools struggled to achieve the consistent implementation necessary for either to be effective. One-on-one paraprofessionals were largely relied upon as an aid to students with behavioral issues, and as IBO saw citywide (see page 14), the largest share utilized were for crisis management.

Related Services: Thirteen percent of students were identified for an evaluation for a particular related service such as speech therapy, or for a concern about provision of services.

Related services discussions highlighted thirteen instances when teams discussed a variety of therapies to assist students in reaching their IEP goals. In six cases, teams encountered delays in evaluations as providers had full caseloads. The remaining seven discussions pertained to students who were in the process of being evaluated for services.

Three of the six cases of delays involved evaluations in other languages other than English. School 3 discussed one student who experienced an interruption in speech services because the provider was on leave. No substitute provider was sent to the school. The district eventually approved a Related Services Authorization (RSA)—authorizing the parents to obtain services from an eligible non-DOE/ independent provider—but it was close to the time when the school provider was returning from leave. A school administrator noted that agencies generally do not favor short-term contracts and that it is often overwhelming for families to find providers outside of schools; consequently, the administrator did not distribute the RSAs to families. The RSA process can be lengthy. The provider list is close to 50 pages long. This administrator said, "It is a hit or miss to find an agency that has openings" and that it could be intimidating for parents to call the agencies as they have to know the specifics of what to ask for, have to be persistent to secure an appointment, and available to take the child to the agency for services. Other barriers mentioned were that some agencies only work in certain geographic areas and that there are time constraints on when services can be provided.

In follow up conversations outside of the meetings, occupational therapists, psychologists, and social workers across schools also lamented their large caseloads. In a couple of instances, providers worked with district level managers to request staffing adjustments. Special Education Teacher Support Services teachers and IEP teachers also contended that they could not keep up with the demand for support.

Setting Appropriateness: Ten percent of students were identified for reasons of "setting appropriateness," with concerns that the community district school was not a suitable learning environment either because programs were not available or because a more restrictive environment was considered more appropriate.

Five of the discussions of setting appropriateness included families seeking specialized programs in District 75, such as those for children classified with Autism Spectrum Disorder (ASD). The DOE offers ASD Nest and Horizon programs that serve some students classified with Autism, but these are not available in all D1-32 schools. The other five discussions of setting appropriateness included students whose behavior

interfered with classroom productivity. Sometimes school teams proposed a more restrictive setting than D1-32; in other times parents requested a more restrictive setting. Since the DOE's 2011 special education policy reform, schools are directed to provide programming specified in the IEP regardless of availability of services or programming. This shift in policy has led to an ongoing debate about how well schools are equipped to meet all of their students' individual needs.

In the meetings observed, school teams expressed somewhat distinct philosophies on the extent to which their school could be expected to serve students with more intensive demands. In School 1, for example, the team discussed how well they were currently prepared to meet a student's toileting needs, with the majority of staff agreeing that they would figure it out. As one team member put it, "Not being bathroom trained doesn't exclude [student] from this school." In another example, the School 6 team determined that they could provide "the appropriate setting" for a student and planned to talk with the parent again about their interest in a more restrictive environment. On the other hand, there were a couple of instances in School 5, where staff expressed agreement that student's behavioral concerns exceeded what could be provided by the school.

Social-Emotional: Six percent of students were initially identified for socio-emotional reasons, defined as additional factors outside of schools affecting students inside of school, such as housing instability, change in family structure, or other stress.

Many of the students identified as struggling were also experiencing socio-emotional hardships. Staff seemed knowledgeable that socio-emotional hardships and trauma could affect student's memory, focus, organization, and motivation, and that learning difficulties, in turn, could increase the risks of anxiety, depression, and social isolation. Staff often expressed being ill-equipped to effectively address these conditions. Although school staff recognized that students who were focused on their basic needs, such as food, housing, or safety were unable to focus as much on learning, they were less sure how to best support these students academically or socio-emotionally. As stated by the social worker in School 3, "Students don't have head space for academics; they are preoccupied with rent and food." Because socio-emotional challenges could be intertwined with academic or behavioral challenges, school staff could be frustrated that they were not addressing the root causes of a student's struggle.

The next section further explores some of the dilemmas that teams discussed, highlighting some of the questions school teams asked about their students. These issues are organized into five categories of concern (academic, behavioral, related services, setting appropriateness, and socio-emotional), first for Pupil Personnel Team meetings, and then for School Implementation Team meetings.

Pupil Personnel Teams (PPT) Deliberations

- It was often difficult to identify the root cause of a student's difficulty, particularly when there is no in-depth information discussed on responses to interventions attempted. There was no standard protocol for PPT meetings, and only one of the six school teams observed routinely referenced interventions attempted.
- In meetings, special education non-instructional staff agreed that interventions were not happening consistently in general education classrooms. They supposed that general education classroom teachers did not know enough about targeted interventions or that they were overwhelmed with meeting so many different student needs in one classroom. Because general education teachers were not required to attend PPT meetings, it was not possible to learn their perspectives on targeting instruction to students in need of additional support.

Figure 9
A Synthesis of Issues Concerning Individual Students That Pupil Personnel Teams Deliberated

School	Academic	Behavior	Related Services	Setting Appropriateness	Socio-Emotional
1	Student new to school is having peer conflicts and seems "lost" in larger class. Student should have been tested and retained in previous school but was not. Not clear if student has an auditory or processing challenge or both.	Student continues to act out. Parent does not agree to an evaluation. Student's behavioral issues are continuing even with a 1-1 paraprofessional. Staff are also concerned with student dependence on the 1-1 paraprofessional. Not clear if root of student difficulty is behavioral or academic.			Student new to school is hyperactive. Behavior seems to be about socio-emotional concerns including lack of housing. Not clear if there are academic struggles. Parent does not agree to evaluation.
2	Chronically absent student is far behind classmates; not clear if chronic absence is the cause of student's learning difficulties or if the student has an underlying learning disability. Student with "low cognitive functioning" evaluated. School thinks it is language based but parent did not consent to speech evaluation.	School strategies to suspend student and develop a Functional Behavioral Assessment (FBA) and Behavioral Intervention Plan (BIP) did not produce desirable outcomes. Parent does not agree to an evaluation.	Bilingual evaluation delays Psychologist recommended speech evaluation, and student was found ineligible for services.		
3	Student tested but found ineligible for services. Teacher doesn't agree with test results; believes student has processing issues. Student distracted in class, not doing work. Received support last year for math. The recommendation is to continue support in small group outside classroom.				Student going backwards academically due to behavior and conflict with peers. Student is dealing with housing instability and a longer commute to school.

Chart continues on next page

Figure 9
A Synthesis of Issues Concerning Individual Students That Pupil Personnel Teams Deliberated, *continued*

School	Academic	Behavior	Related Services	Setting Appropriateness	Socio-Emotional
4	There is a discrepancy in student's dictating and writing; how to determine where the breakdown is for the student? ELL student provided with support outside of class a couple times a week. Question is whether student is being pulled out of class too much.	Student can read, decode text and write. Issue seems to be more about behavior.	Student needs speech evaluation but provider has full caseload.		Student has difficulty with self-regulation in class – behavior is distracting to peers and to student themself. Student is experiencing family trauma.
5	Is the student's struggle linguistic or cognitive?		Bilingual evaluation delay		
6	What is best support for student learning English language and struggling academically? Student new to school is not retaining information.	Student behavior seems to be worsening in classroom. Strategies teacher has tried are not working.		Evaluation requested by parent who has expressed interest in specialized program in D75	Student distracted in class and is not doing academic work. Student is experiencing family trauma.

SOURCE: IBO analysis of observations by principal investigator

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- Given the time and resources needed for interventions to succeed, meeting participants were generally skeptical about academic and behavioral interventions that could be provided in general education classrooms. Yet PPT members overwhelmingly agreed that when interventions are not provided in general education classrooms for students identified as struggling, referrals to special education rise

Recall that PPT teams are tasked to identify, implement, and assess interventions available to any student in the general education setting to ensure sufficient consideration has been given to alternatives to special education. In this section IBO revisits some of the individual student cases in PPT meetings (as notated in the table) and focuses on how school teams discussed interventions prior to or in lieu of a special education referral.

As described in the previous section, there was a wide array of concerns about individual students that school teams reviewed in their PPT meetings. While IBO categorized five initial reasons students were discussed, it was evident that identifying the root cause of any struggle was perplexing, as many concerns were overlapping: whether students who exhibit behavioral challenges were actually having difficulty with academic material in class; whether a learning delay was the result of chronic absenteeism or a disability; "the gray" area between language acquisition and cognitive difficulties; as well as parsing out socio-emotional impacts on student's experiences in school. What was initially thought to be a behavioral concern might have actually been an academic one or vice versa. The complexity of the cases points to the necessity for school staff to know each student in depth to be able to best support them.

Certainly, the mobility of students presented additional difficulties for staff as they worked to understand their struggles and decide whether to pursue a referral for a special education evaluation. At times, students discussed in the meetings were new to the school and staff stated that they had not had time to get to know those students well. In one case, it was not clear whether the student had been tested for special education services in a previous school attended (a non-traditional district school). In other cases, students left their current school before the staff could complete an investigation; for example, in School 1, a student changed

schools before the team completed the audiological exam. Overall, the mobility of students certainly presented additional difficulties for staff as they worked to understand their students' struggles and decide whether to pursue a referral for a special education evaluation. There were other complications such as delays in evaluations and results, and instances when school staff and parents were not in communication or disagreed on how to proceed.

Ultimately the depth and extent of questions school teams could ask about their students' struggles was dependent on the kinds of interventions the school team had previously attempted, or in the instances of new students, the kinds of interventions the school team was preparing to attempt. Interventions were not uniformly referenced in the PPT meetings observed. Based on IBO's observations, it was often not clear which interventions had been attempted and how information about interventions previously attempted was utilized to make decisions about referrals for special education evaluations. Five of six schools in this sample did not consistently reference specific interventions previously attempted in their discussions.

Although the state requires all schools to attempt interventions in general education classrooms when needed, School 4 was a standout case in consistently discussing interventions in the PPT meetings and integrating data on students' progress in response to interventions into their decision-making. For example, in one individual case, the team explored where the breakdown was between a student's ability to dictate their understanding of the classroom material versus their ability to write about it. After noting that the student had not made improvements in the general education classroom (through small group work and some other modifications the teacher made to instruction), the team provided the student with small group support in reading comprehension outside the classroom for a period of six weeks, monitoring the student's progress throughout. The IEP teacher who provided the support tracked the student's progress in an Excel document for the PPT to discuss, and when the student demonstrated adequate progress, the team made a decision to stop pulling the student out of the general education classroom for small group support work and return the student to general classroom.

School 4 staff said they benefited from instituting a Response to Intervention (RTI) process, as schools are required to do under state regulations. RTI is a three-tiered instruction and intervention model that promotes early identification of students in need of additional support. RTI mandates a screening assessment for all students and the use of a research-based curriculum with all students. Struggling students are provided with interventions at increasing levels of intensity to accelerate their rate of learning. These services may be provided by a variety of personnel, including general education teachers, special educators, and intervention specialists such as the IEP teacher. Progress is closely monitored to assess both the learning rate and level of performance of individual students and educational decisions about the intensity and duration of

Three Tiers of RTI Support Used in School 4

In Tier I, the general education teacher uses different methods of instruction to meet students' different learning styles and skill levels in the classroom. Students are routinely assessed to ensure they are progressing adequately and students not meeting benchmarks are referred to Tier II.

Students in Tier II are provided with instructional support for a period of six to eight weeks until the next assessment. These interventions occur in small-group settings either inside or outside the classroom. Intensity can vary across group size, and frequency and duration of intervention. Individual student progress is monitored closely.

Students who continue to show little progress are considered for more intensive interventions, typically with one-to-one support as part of Tier III services.

interventions are based on individual student responses. School 4 was purposeful in infusing their discussions about RTI—the specific interventions attempted and individual student progress with those interventions—for each of the students discussed in their PPT meeting. In fact, the school renamed their PPT "the RTI meeting."

It is important to note that School 4 served a share of students with IEPs below the citywide average. Compared with the other five schools in the sample, School 4 also reported a minimal number of behavioral and socio-emotional challenges.

When asked, the remaining five schools in this study reported utilizing interventions to ensure sufficient consideration had been paid to alternatives to special education, even though these were not discussed in the PPT discussions observed. For example, School 2 reported a multi-step process of identifying a multitude of students who were struggling to meet academic benchmarks at their grade levels. The psychologist and IEP teacher who jointly coordinated this work said that they knew their students well and that their smaller school size allowed them to follow dozens of students at each grade level with interventions in process.

In School 5, the IEP teacher identified six students for more intensive support and met with the group of students twice per week for specialized instruction outside the classroom. At the end of data collection for the study, which corresponded with the end of the school year, the IEP teacher reported that all six students had made progress, pointing to increased assessment scores. The IEP teacher added that the school had circumvented referrals to special education evaluations as a result. However, the IEP teacher also indicated that all students would remain in the group the following school year, raising the question about the duration of intensive interventions that would lead to prolonged absence from their general education classroom despite the progress that students made.

School 3 utilized a protocol that asked referring teachers to first record strategies they had tried in the classroom and then to come to the meeting to explain them. School 3 was purposeful in both setting aside time for the presenting teacher to share their perspective on how strategies were working (or not) as well as time for colleagues in the meeting to offer additional suggestions. Their protocol also prompted classroom teachers to name areas of strength for individual students so that the larger team could also consider this important information. School 3 discussed general strategies such as modifying seating arrangements, providing alternative texts and timers for activities, and breaking up assignment tasks. In the meetings observed, staff did not discuss data on interventions attempted.

In School 1, although staff was required to list interventions on their PPT form, a step to ensure the robustness of the referral process, meeting attendees did not discuss the referral forms, or any pertinent data contained within them in the meetings, although some staff posed that requiring teachers to complete a written form had an effect of slowing referrals for special education evaluations. In School 1's meetings, interventions in the general education classroom were not discussed at all. It was difficult for an observer to assess if that meant interventions were not being attempted with students identified as struggling or were not being documented. An Assistant Principal expressed some hesitancy about the number of referrals for evaluations discussed in the meetings, exclaiming "IEPs are not for children who need extra help." But this same administrator indicated that evaluation would be necessary, especially for students with struggles undetected in previous schools they had attended, arriving at this school significantly below their grade level and needing substantial support to meet grade level expectations.

Across schools, non-instructional staff involved in the PPT meetings generally agreed that academic interventions were not consistently happening in general education classrooms (Tier I) either because classroom teachers did not know enough about specific interventions to meet diverse student needs or because classroom teachers were overwhelmed with having to meet so many different needs in

one classroom. When pressed to provide more details, Special Education aides said that some of the instructional strategies that general education teachers were utilizing were not tailored sufficiently to those students who are struggling academically. Because general education teachers were not typically present in the PPT meetings, it was impossible for the researcher to learn their perspectives and experiences with providing interventions to students in need of additional support, to learn if such supports could be sufficient to avoid having students referred for a special education assessment.

Meeting attendees were also skeptical about the availability and efficacy of behavioral interventions such as functional behavioral assessments (FBAs) and behavioral improvement plans (BIPs) in general education classrooms. When asked why they were skeptical, staff said they doubted these interventions, which take time to develop and monitor, could be implemented without more resources. For example, the psychologist in School 2 said: "*A [Behavioral Intervention Plan] in theory should work. But it takes time for it to work. When you have a child who is disrupting everyone else, no one wants to give it the time it needs to work. [Everyone] wants a fast magic-wand solution and there isn't one*." When asked which school resources are needed to successfully implement a BIP, this psychologist referred to resources previously accessed in a private school: "*[Some] schools have a full-time behavioral consultant, a psychologist whose full-time job is to plan FBAs and BIPs. When you're given the resources to implement these things, it works. In DOE schools we don't have money. We don't have the Psychologist five times a week…*" [Psychologist, School 2]. In both academic and behavioral cases, staff in the meetings drew a connection between their discussions about the health of general education and special education programs, specifically noting that a lack of interventions on the general education side could mean an increase in referrals on the special education side.

Without discussion of specific interventions, there could be little distance between presenting the struggles students were facing and considering a referral for special education evaluation. Sometimes a parent's refusal to agree to an evaluation was the only factor that slowed the referral process. For example, in School 1, of 15 students discussed in PPT meetings, five parents reportedly did not agree to an evaluation—one third of the cases reviewed in the meetings observed. Overall, in the PPT meetings observed, there was no standard protocol followed for discussing interventions attempted or student-specific response data to inform decision-making.

Certainly, School 4 was a standout case in this small sample of schools of having a RTI model in place where students not making adequate progress are provided with increasingly intensive instruction matched to their needs on the basis of their levels of performance. School 4 administrators encouraged the RTI process and made it integral to the school culture and work. Still the Assistant Principal expressed frustration that RTI was an unfunded mandate, saying, "the process is backwards with the money being on the [special education] services side and *not* on the intervention [and prevention] side."[16]

School Implementation Teams (SIT) Team Deliberations

- Setting availability was a major focus of the school implementation teams despite DOE's guidance to the contrary—that recommendations should instead be based on their appropriateness for the student's needs, not the availability or unavailability of a program or service at the school. Small schools in particular were often limited in types of settings they could provide. Flexible programming was particularly difficult to implement at the elementary school level.

- Because teams had little confidence in the supports they could provide to students with behavioral problems, self-contained classrooms were often the first and only settings considered. But it was widely recognized across school teams discussions observed that concentrating students with behavioral challenges in self-contained classrooms could cause behaviors to worsen.

- Among cases where self-contained classrooms were discussed, concerns about restrictiveness of setting or lack of time with peers without disabilities were not voiced. In those cases, however, self-contained classrooms were viewed as least-restrictive, adding nuance to how those classrooms are perceived.

The SIT is a fairly new special education structure in DOE schools—introduced in 2015-2016 and charged with analyzing the overall instructional and programming needs for students with disabilities as well as making strategic decisions about how to deploy the school's resources (budget, staff, and space) to serve all students in accordance with their IEPs. The SIT does not make formal changes to the IEP but helps schools prepare for upcoming IEP meetings. In IBO's observations of these meetings, school teams most often discussed setting availability when reviewing individual cases of students with IEPs.

Knowledge of setting availability is certainly germane to discussions about programming options. Indeed, programs do not operate in a vacuum; school teams weighed the availability of seats in each setting such as the number of available seats in a self-contained classroom or the number of available "IEP seats" in an ICT classroom. They also considered the composition of the student groupings inside any of these settings—recognizing the academic and/or behavioral climate of a classroom and how well any individual student would function within that larger class.

Schools could be limited in the settings and services they could provide. This was especially true in the smaller schools in the sample (Schools 1 and 2), which did not have the enrollment numbers to offer multiple program settings on each grade level. As an alternative, these schools were more likely to create bridge classrooms that span grade levels (for example, a K-1 classroom). Setting offerings were dependent on layered resources. School 1 was successful in applying for mid-year funding to open another classroom at the Kindergarten level, but then ran into difficulty in hiring necessary personnel later in the year. Schools with space challenges also struggled to open additional classrooms. Lastly, schools had to contend with caseloads of related service providers, SETSS providers, and paraprofessionals; there were a few discussions observed of students with delayed services due to case overages or provider absences.

While setting and service availability is critical to discuss, staff also struggled to consider other options. School teams were often locked into existing programming structures and found it difficult to envision alternatives. Some of that difficulty could be explained by their steadfastness to the IEP document, knowing that what was written on the IEP was a legal mandate. Their difficulty, though, also had to do with the inflexible nature of programming. For example, School 2 acknowledged that a self-contained classroom setting may indeed not be as effective an option for students who were both "acting up" and yet stronger academically than their classroom peers but were stymied in what to consider instead. On the other hand, School 1 staff was troubled that one of their self-contained classrooms was overrun with students with behavioral challenges, and therefore was not a supportive learning environment for students processing material more slowly. In other words, self-contained classrooms were perceived as either a behavioral intervention or an academic intervention, but not as both. Even teams that recognized the value of self-contained classrooms for students needing a smaller environment with less distraction and more supervision—but were uncomfortable recommending a self-contained classroom for the entire school day because of academic limitations—did not find it realistic to implement an alternative.

Although flexible programming is encouraged as part of the policy to place struggling students in the least restrictive environment, it is difficult to achieve at the elementary school level in part because it requires coordination between teachers. If a staff member is not available, students must travel to different classrooms by themselves, movement that is not typical of the elementary school experience. Flexible programming also requires the buy-in of parents and a formal change to the IEP. Taken together, these challenges provide some explanation for why less than 5 percent of elementary students with IEPs citywide were recommended for flexible programming. However, flexible programming was used in instances

Figure 10
A Synthesis of Issues Concerning Individual Students That School Implementation Teams Deliberated

School	Academic	Behavior	Related Services	Setting Appropriateness	Socio-Emotional
1	What to recommend for student who needs academic help when 12-1-1 class is overwhelmed by children with behavioral challenges? Self-contained classroom is considered better option for student struggling. Student is recommended for ICT classroom, but school does not have classroom at that grade level.	Concern with student's dependence on 1-1 paraprofessional to address behavioral challenges.	Student needs occupational therapist (OT) but provider has full caseload.	Parent has expressed interest in specialized program for students with Autism; school does not have program. When classrooms settings are full, can school still offer student flexible programming?	
2	Self-contained classroom considered best for student easily distracted, needing smaller instructional environment (and academically strong) ICT classroom more suitable for student, but there is no seat available at first.	BIP did not work for student. Suspension did not work. Conversation with parent did not work. School recommended D75 program.	Parent requested occupational therapy (OT) and counseling evaluations. Student was found ineligible for OT. Struggle persists.	Student with behavioral problems found eligible for 12 month services. Staff and parent agree this school is not appropriate setting for student and more restrictive is necessary. When classrooms settings are full, can school offer student flexible programming?	
3	Student is receiving Special Education Teacher Support Services (SETTS) in classroom, is progressing some but is still behind.		Student needs speech services but speech provider is on extended leave.	Student is recommended bilingual special education programming that school does not have available.	

Chart continues on next page

Figure 10
A Synthesis of Issues Concerning Individual Students That School Implementation Teams Deliberated, *continued*

School	Academic	Behavior	Related Services	Setting Appropriateness	Socio-Emotional
4	Student making progress but still needs help with main idea, comprehension.	While student was initially flagged for needing academic help, the challenge is more behavioral. School needs to explore modifying therapies.	.		
5			External agency has provided a report recommending one-to-one crisis paraprofessional, but school does not agree.	School does not have programming for students classified with autism.	
6	Student could benefit from smaller classroom for academic support but self-contained class is full. Self-contained classroom discussed as a benefit for student (smaller class, more time on instruction).	Student behavior worsening in general education classroom. Recommendation is for ICT but no seats available. Student behavior worsening in self-contained classroom.	Student could benefit from SETSS but provider has full case load.	School discusses D75 programming with parent of child with acute behavioral concerns. School disagrees with parents request for more restrictive environment for child. School and parent agree that D75 is more suitable environment for student with behavioral concerns	

SOURCE: IBO analysis of observations by principal investigator.

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when program settings or seats were unavailable, or in a handful of cases, when individual students were discussed as exhibiting more profound strength in one subject area and weakness in another. Despite all the challenges in implementing flexible scheduling at the elementary school level, School 5 talked with parents at lengths about the benefits of flexible programming so they would agree to IEP recommendations, coordinated teachers schedules so they could accommodate students moving between classrooms, and encouraged their students to travel from one classroom to another like middle school students.

School teams did not express confidence in the efficacy of supports that could be provided to students with behavioral challenges in more inclusive settings, and as a result, self-contained classrooms were often the first and only setting discussed. On the other hand, the majority of the schools in the sample, recognized that their self-contained classrooms could be overwhelmed by many students with behavioral challenges, essentially becoming a setting where student behaviors could worsen. School teams said they did not have many other options to provide students who needed more support. For those students with the most acute behavioral

concerns, teams either discussed crisis management paraprofessionals, or District 75. When asked what behavioral supports District 75 programs had at their disposal that Districts 1-32 schools did not, meeting attendees responded that staff in District 75 generally had more experience working with students with behavioral challenges, and that there were more resources, including more personnel available in District 75.

Among cases where self-contained classrooms were discussed, concerns about restrictiveness in setting or the lack of time with students without disabilities did not arise. Teams instead focused on benefits students would receive from self-contained classrooms with more attention from staff, less distraction from peers, and in the case of District 75, specialized supports. Both Schools 3 and 6 identified students who would benefit from the unique programming offered in District 75 and pushed back against the notion that a more restrictive environment was not in the best interest of the child. In these cases, school teams were more likely to vocalize confidence that restrictive settings (smaller classes and with more specialized attention and resources) were advantageous. Simply put, staff did not come to the discussions considering a less restrictive environment first, nor did they necessarily see their roles as ambassadors for a less restrictive environment for all students.

Across schools, it was most evident that teams struggled to pursue less restrictive environments for their students with behavioral challenges even when they initially sought to do so. For example, School 1 initially worried that a student's reliance on a 1-1 paraprofessional would lessen their independence. Ultimately though, the school reinstated the 1-1 paraprofessional after concluding that removing the support for a short time seemed to aggravate the student's behavior. Several systemic factors were named as barriers to providing an effective less restrictive environment. Staff from schools 1, 3, and 6 remarked that they had repeatedly instituted behavioral implementation plans (BIPs) with limited success. School 2 underscored that more resources, such as a full-time dedicated staff, were necessary to properly implement a BIP and that without those resources, the school's hands were "tied" in recommending District 75 programming instead. Staff across schools also asserted that general education teachers did not have adequate training in addressing students' socio-emotional needs, in classroom management or de-escalation. For all these reasons, staff participating in SIT teams seemed resolute that students with behavioral challenges often could not be effectively integrated in a general education setting with peers without disabilities.

In some cases, staff voiced opposition to considering more inclusive environments simply for the sake of remaining devoted to the policy goal. Several staff stressed that the appropriate least restrictive environment needed to be tailored for each student; for one student, the least restrictive environment could be a self-contained classroom and for another, it could be the general education classroom. In one example, an administrator in School 5 expressed frustration for having to go through levels on the continuum from least to most restrictive. Referring to a child who had jumped onto and walked across the front office counter, this administrator said that not being able to consider District 75 programming without first considering a self-contained classroom was more a function of what was legally mandated than what was best for the student. Nonetheless, five of the six schools teams pointed to at least one case of moving a child to a less restrictive setting; these instances stood out as moments of immense pride for school teams, but they were also the product of tremendous energy and effort, and were perceived as an exception.

Although parents were not in attendance in either PPT or SIT staff meetings, generally school staff described parents as misinformed about LRE, requesting more restrictive services without realizing the deleterious impact this could have on their children. Staff pronounced a clashing of perspectives between themselves and parents, with staff seeing services as "less is more" versus parents seeing services as "more is more." School teams were far less likely to concede that school staff did not always know how to communicate effectively with parents or appreciate their expertise. While school staff identified some of the challenges they encountered working with parents, IBO facilitated conversations with parents and advocates to identify challenges in navigating the special education system in New York City from their perspective.

Parent Focus Groups Emphasize Importance of Decision-Making Processes

The principal investigator conducted eight focus groups with parents of students with disabilities to gain general impressions of parents' insights and experiences of special education processes at the school level. Focus groups involved a total of 38 parents with children with disabilities across the city. The focus groups offered insights from parents who self-identified as special education advocates (13) and as parents new to the process (25). Twenty-four were parents of children attending district schools and 14 had children in District 75 programs . Two of the eight focus groups were conducted in Spanish, the remainder in English.

Advocates agreed that parents of children with disabilities would benefit from additional supports to maneuver the complex process of special education and specifically to know their rights in the process, including:

- to read their children's present and past IEPs, evaluation results, and school records;
- to an independent evaluation;
- to full participation in IEP meetings including language translation, and the assistance of an advocate;
- to withhold or take back consent to services;
- to due process.

The majority of parents who did not identify as advocates generally stated that they did not know whether the services their children received were effective, or how to ask more questions about them. For example, Parent 2 in Focus Group 2 asked: "*How does one have more information about [the services]? As a [parent] how can I learn more? How do I know that they are doing the therapies correctly? How can we verify that sort of thing?*" Other parents asked how they could help their children with their homework.

From advocates, there was a perception that schools "*pursued recommendations according to what meets the school needs, not necessarily the needs of the parent or the needs of the child*" (Parent 3, Focus Group 4, Brooklyn) and that school staff needed to do more to educate and include parents in educational discussions.

Parents who could point to direct access they had to key decision makers in the special education process described staff members' hands-on participation in securing their children's more intensive services, such as classroom equipment and assisted technology. These parents commended the willingness of department administrators to be responsive, while also criticizing the department for not having a way to ensure this level of responsiveness to all families. One advocate extended this critique, commenting that the current state of the system set up a dynamic that required individual staff to take extraordinary efforts to meet the needs of students because systemic processes were not in place: "*When we say that the system is broken…decisions depend very much on the principal's commitment to an individual kid…that's a broken part right there. The [current] system requires extraordinary people to do a decent job…[instead] we need a system that only requires average people.*"

(Parent 1, Focus Group 5, Manhattan).

Recapping the School Meetings

Across the schools observed, staff considered both PPT and SIT meetings beneficial structures to discuss their students' challenges, to consider referrals to special education, and to review programming in progress. School staff valued team meetings as an opportunity to collaborate to benefit their students—to weave multiple perspectives together for a fuller picture. For example, they were able to learn that a student was having a more fruitful learning experience in one classroom than another or they were able to bridge different conversations individual staff had with the same parent. The structure of the meetings themselves helped guide discussions. Moreover, the meetings observed provided insight into the larger instructional and operational infrastructure at the schools that influenced how staff discussed appropriate settings and supports for their students.

Protocols varied widely—especially in the PPT meetings—with regard to which staff members participate in the discussion. Only one principal regularly attended the meetings (School 6). The other five school teams regularly had an assistant principal present. Meeting attendees across schools noted that follow up in the meetings was less effective without the principal actively engaged. Only two schools (Schools 3 and 4) invited general education teachers to participate in the discussion of students identified as struggling. At all schools, however, there was unanimous agreement among team members that the presence of the general education teacher was critical, given that the majority of referrals for evaluations came from them. Additionally, there was recognition that without the general education teacher present, important information could be missing.

How school teams structured their meetings also shaped team discussions. With the use of a discussion protocol, Schools 3 and 4 were able to prompt all participating staff attendees (including their general education classroom teacher) to contribute their insights and build collective knowledge. These two schools (and School 5) also structured meetings to discuss fewer students, and as a result, could delve deeper in their discussions of each student's struggles. Schools without a discussion protocol could bring up as many as 15 students in one meeting, with an average of five minutes or less to review cases of individual students. Time in the meetings without discussion protocols was too short given the number of students to be discussed, the complexity of the issues presented, and the range of perspectives to be heard for each case.

There was inconsistency in the school discussions about specific interventions that were attempted prior to a referral for a special education evaluation. Similarly, there was an unevenness in schools' practices of including data from the interventions attempted in the discussions. Again, School 4 was unique in identifying specific interventions attempted, as well as discussing data on the intervention attempted in the meeting. Across schools there was a shared concern that not having sufficient academic or behavioral interventions increased the number of referrals into special education. Certainly, not having standard protocols in the PPT meetings to ensure teams discussed interventions exacerbated this concern.

School teams were in agreement that general education teachers needed more training and professional development to provide a first level of interventions in their classrooms rather than consider students for special education services. School administrators noted that Academic Intervention Services (AIS) while mandated, were not funded in school budgets and therefore, usually lacking. They were looking for specialists to reach more struggling students at the same time that they were looking for their general education teachers to do more to address students' unique and diverse needs in their classrooms. School administrators acknowledged that there was simply not enough bandwidth to work with more students who were in need of additional support. While the new and centrally funded IEP teacher was repurposed as an interventionist, that resource was not considered sufficient at the school level (especially at the schools in the sample with large numbers of students who were behind grade level).

Discussions in SIT meetings were largely centered on existing programming availability. If the setting outlined in a student's IEP was not available at the grade level, teams were constrained in considering alternative options. Because of logistical difficulties, flexible programming was rarely pursued. Teams also doubted the supports that could be sufficiently provided to students in inclusive classrooms, especially for those students with behavioral challenges. Behavioral issues dominated the focus of SIT meetings despite more students being initially identified for academic reasons. School teams both acknowledged that their efforts were more focused on those students who required extra attention, and that they were challenged with how to stay on top of those cases not as acute. Without more resources to effectively address behavior concerns, school teams were more likely to discuss more restrictive settings. Securing services or programming options when they are not immediately available at the school level would require more thought, strategy, and time. Case overloads also added to the difficulty of considering alternatives.

Meetings were scheduled for one classroom period and usually occurred once a month. Given the complicated nature of the discussions, it was surprising that such a short period of time was allocated. Without more time, teams were limited to identifying a basic struggle and an automatic next step. Once the meetings concluded, there was no way for IBO to track how determinations were ultimately made. Sometimes updates on students who were previously discussed were provided at subsequent meetings. Other times, information requested by the investigator from the team about the outcome of a case was not always available.

There are multiple layers of follow-up for schools after a student's struggle is detected or revisited. A critical perspective—that of parents/guardians of the children discussed—was absent from the PPT and SIT meetings because parents only attend IEP meetings. As a result, coordinating between SIT and IEP meetings took on even more importance. While staff appreciated SIT meetings as an opportunity to begin to discuss challenges of their students, they also stressed that the time outside of the meetings mattered more. They realized that they needed a structure to stay on top of multiple developments within each case. For many of the individual cases discussed in the meetings observed, there was no resolution at the end of the school year.

Section 5

Tracking Students Over Three Years

Introduction and Summary

In the qualitative portion of this study, IBO explored some of the challenges schools encountered when tasked with identifying the most appropriate education in the least restrictive environment for their students with IEPs. Teams in the school implementation meetings reported the difficulty in moving students to less restrictive settings, often citing challenges with program availability at the school and grade level. For those students with behavioral challenges, teams did not trust the efficacy of ICT and general education settings and instead were more likely to discuss self-contained settings. Additionally IBO's analysis of data from 2016-2017 for students classified as having an intellectual disability, autism, or emotional disturbance found that larger shares of those students were recommended for self-contained settings, which meant that they would spend no instructional time with their peers without disabilities.

In this section, IBO returns to quantitative data on all elementary school students with IEPs to see if patterns in that quantitative data supported findings observed in school team meetings. There were no major changes to department-wide policies on special education placement across these years. IBO examined the extent to which there were changes to programming recommendations over a three-year period (2014-2015 through 2016-2017). In particular, IBO looked more closely at year-over-year changes in programming recommendations during this time period, focusing specifically on those students recommended for changes into and out of self-contained settings as proxies for a more or less restrictive environment, respectively. IBO also examined availability of programming with any changes in recommendation.

Overall, IBO found that students with IEPs are generally recommended the same most frequent setting two years later, especially those recommended for Integrated Co-Teaching (ICT) and self-contained classrooms. Over 80 percent of students with disabilities who were recommended self-contained classrooms—the least integrated setting for students with IEPs—at the beginning of the study continued to be recommended self-contained classroom settings two years later. Similarly, students who were recommended to spend all of their instructional time in integrated settings—fully integrated with their peers without disabilities—at the beginning of the study period were almost equally as likely to remain so two years later.

Regression analyses demonstrated a strong positive association between the availability of a self-contained classroom at a student's grade level and a recommended move into a self-contained classroom. The availability of an ICT classroom was negatively associated with a move into a self-contained classroom and positively associated with a move out of a self-contained classroom, although the magnitude of these effects was not as large as those for the availability of a self-contained classroom.

Changes in Special Education Programming Recommendations

IBO tracked recommendations for the subset of students who attended elementary schools serving grades kindergarten through five in school year 2014-2015, and who had IEPs for all three years that we observe: from 2014-2015 through 2016-2017.[17]

IBO's dataset comprises approximately 48,000 students who attended an elementary school in districts 1-32 over the 2014-2015 through 2016-2017 period and who had an IEP in each of the three years. Roughly 5 percent of students initially in the sample in 2014-2015 changed to a school outside of districts 1-32; 3.2 percent went to a charter school, 1.8 percent went to a District 75 school, and a very small share went to an alternative school. Due to lack of availability of complete data for these types of schools, these students

were excluded from these analyses.

Looking at students' most frequent setting over three years, IBO found little change for those initially recommended for Integrated Co-Teaching (ICT) or self-contained classrooms. Of those students recommended an ICT classroom in school year 2014-2015, nearly 81 percent were recommended to have an ICT setting two years later. Of those students recommended a self-contained classroom in school year 2014-2015, 83.0 percent were again recommended a self-contained classroom two years later. For those students recommended for a self-contained classroom for three years, it also means they spent no time with their peers without disabilities during that whole time period. Regardless of students' initial recommended setting, over 76 percent of students with IEPs were recommended the same most frequent setting two years later.

What Factors Are Associated with Recommended Moves Into or Out of Self-Contained Classrooms?

While the majority of students with IEPs in the sample were recommended the same setting over a period of three years, almost a quarter of students did experience a change in recommendation for their most frequent setting. Findings from observations of school-based meetings indicated that staff weighed program availability at the school and grade level when considering settings for individual students, which suggested that availability may be a precursor to changes in recommendation. Staff were also more likely to discuss more restrictive settings for those students perceived to exhibit behavioral challenges.

IBO used regression analysis to explore school-level and student-level factors associated with changes in recommended setting. IBO focused on students with IEPs who were newly recommended a self-contained classroom or other settings; self-contained classroom settings are used as a proxy for a more restrictive environment. For this analysis, IBO looked at year-over-year changes in recommended setting from 2014-2015 to 2015-2016 and from 2015-2016 to 2016-2017. These data were combined into one panel to look at consistent associations across two years of potential changes in students' recommended settings. Separate logistic regression models were employed to examine any changes into and out of self-contained classrooms and accounted for the clustering of students within schools. Logistic regression was used to model one dependent binary variable.

At the student level, IBO controlled for race, whether a student is residing in a low-income neighborhood, English Language Learner status, prior disability classification (emotional disturbance, intellectual disability,

Figure 11
Over 80 Percent of Students Recommended for Integrated Co-Teaching or Self-Contained Classrooms in 2014-2015 Were Recommended the Same Setting Two Years Later

	Most Frequent Setting Recommendation, 2016-2017				
	General Education Classroom				
Most Frequent Setting Recommendation, 2014-2015	Related Services Only	Special Education Teacher Support	Integrated Co-Teaching Classroom	Self-Contained Classroom	Total
Related Services Only in General Education Classroom	65.7%	12.4%	17.3%	4.7%	100.0%
Special Education Teacher Support Services in General Education Classroom	6.6%	55.6%	30.0%	7.7%	100.0%
Integrated Co-Teaching Classroom	4.7%	3.7%	80.7%	10.9%	100.0%
Self-Contained Classroom	4.2%	1.1%	11.7%	83.0%	100.0%

SOURCE: IBO analysis of DOE data, school years 2014-2015 through 2016-2017
NOTE: Students with IEPs attending DOE schools for all three years. Excludes two students missing data on most frequent setting.
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or autism), prior chronic absenteeism (a proxy for academic outcomes) and prior suspensions (a proxy for social outcomes). Specific to those students who were not in fifth grade in the prior year (2014-2015 and 2015-2016, respectively) for the year-over-year changes IBO also controlled for whether the student changed schools. IBO wanted to parse out those students who change schools due to a promotion to middle school from those who may change schools for other reasons such as programming availability. IBO also included grade-level identifiers for the grade the student was entering, controlling for second through sixth grade, with first grade as the reference category.[18]

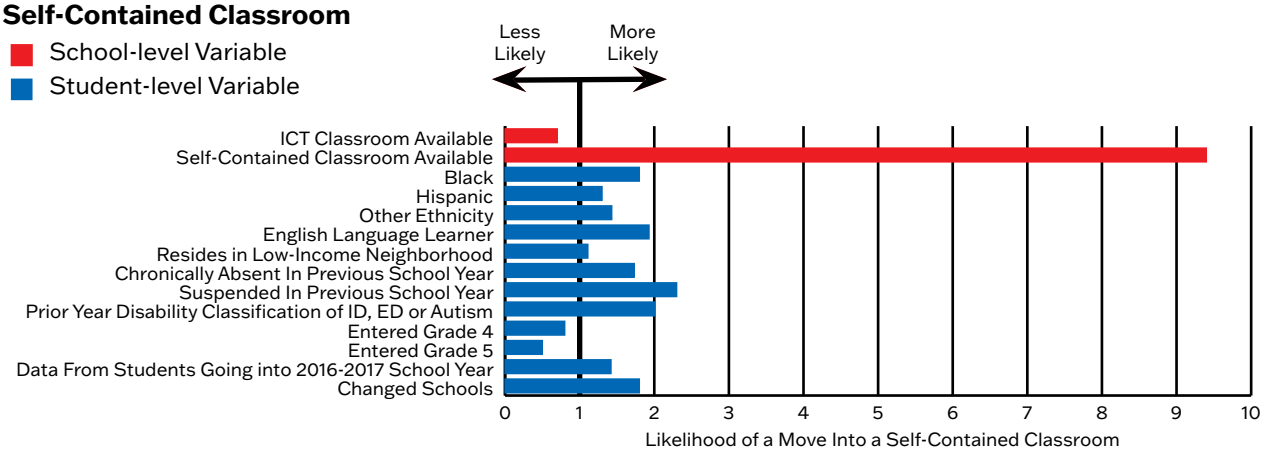
IBO further controlled for school-level factors such as school size, school climate (using the school suspension rate as a proxy), and overall student demographics (percent of students with an IEP, share of Black and Hispanic students, and percent of students residing in low-income neighborhoods). Because staff in school meetings spoke regularly about the availability, or lack, of Integrated Co-Teaching Classrooms (ICT) and self-contained programs at particular grade levels, IBO controlled for the availability of these programs at the school and grade level the student was entering. For example, when looking at a student with an IEP who was entering first grade in 2015-2016, IBO controlled for the availability of a first grade ICT classroom and the availability of a first grade self-contained classroom at the student's school in 2015-2016. It is important to note that this measure of availability captures whether a setting is available but not necessarily whether there is an open seat in the classroom. Similarly, while it is possible that classrooms were made available to students because of the need to place them in the most appropriate least restrictive environment, this study's qualitative findings suggest that program availability was heavily weighed by schools in considering next steps.

Factors Associated with a Recommended Move into a Self-Contained Classroom. To isolate changes in recommendations for those students newly recommended self-contained classrooms, IBO limited the sample to the approximately 75,000 observations of those students with IEPs who had not been previously recommended a self-contained classroom.

To examine recommendation changes for students between years 2014-2015 to 2015-2016, IBO focused on students who had not been recommended a self-contained classroom in 2014-2015 but then were recommended one the following year; a similar methodology was applied for recommendation changes from students from 2015-2016 to 2016-2017. Of the 75,000 observations, more than 4,500 students (6.1 percent) were subsequently recommended for a self-contained classroom in the following year.

Figure 12

Odds of School and Student Level Variables Associated with Students Recommended a Move Into Self-Contained Classroom



SOURCE: Only results that are statistically significant at the 95 percent confidence level are shown. Orange bars denote school-level variables while blue bars denote student-level variables.
NOTE: IBO analysis of DOE data, school years 2014-2015 through 2016-2017.

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School Factors. Students attending schools where a self-contained classroom in the grade they were entering was available to them were 9.4 times as likely to be recommended for a self-contained classroom than students attending schools without a self-contained classroom in the appropriate grade. If an ICT classroom was available to the student in the grade they were entering, the student was 0.7 times as likely—that is, 0.3 percent less likely—to be recommended a self-contained classroom. Essentially, for a student newly recommended a self-contained classroom, the magnitude of the effect of having a self-contained classroom available on their entering grade level was greater than the magnitude of the effect of having an ICT classroom available. These results reinforce findings from the qualitative data, in which school team largely considered setting availability when discussing programming recommendations and access for students with IEPs. The availability of self-contained classrooms more than the non-availability of ICT classrooms was positively associated with a recommendation of a self-contained classrooms.

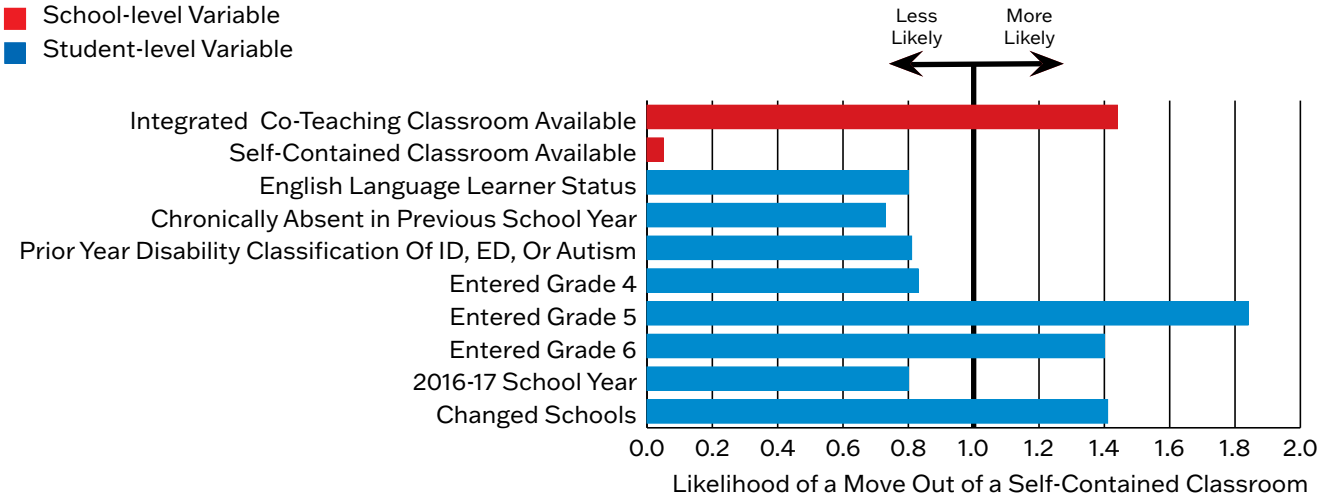
Student Factors. Several student demographic characteristics were associated with an increased likelihood of a student being recommended a move into a self-contained classroom. Students' prior year suspension, prior year disability classification, and English Language Learner status were all strongly positively associated with a move into a self-contained classroom. Students who were suspended in the prior year were 2.3 times as likely to be recommended for a self-contained classroom compared with students who had not been suspended. Additionally, students who had a disability classification of intellectual disability, emotional disturbance, or autism were almost twice as likely to be recommended for a self-contained classroom compared with students with other disabilities—findings that mirror IBO's observations of school meetings where self-contained settings were more likely to come up in discussions of students perceived to have behavioral challenges. Of all racial groups, Black students had the highest likelihood of being recommended for a move into a self-contained classroom—they were 1.8 times as likely to be recommended a self-contained classroom compared with White students. Though some research has demonstrated that bias can be a factor in the pre-referral process (Knotek, 2003), school staff did not explicitly refer to students' racial or ethnic identities in the meetings we observed. Finally, ELLs were 1.9 times as likely to be recommended a self-contained classroom compared with non-English Language Learners. This finding supports observations of school meetings, where staff discussed challenges in parsing out language difficulties from cognitive disabilities.

IBO additionally found that students who changed schools (except for those in fifth grade in the prior year) and students who were chronically absent in the prior year were respectively 1.8 and 1.7 times as likely to be newly recommended for a self-contained classroom. Finally, students entering higher grades (grades 4 and 5) were considerably less likely to be recommended a move into a self-contained classroom relative to first grade students (0.8 and 0.5 times as likely, respectively).

Factors Associated with a Recommended Move Out of a Self-Contained Classroom. For the second logistic model, IBO limited the sample to roughly 33,000 observations of students who were recommended a self-contained classroom in the prior year. To observe changes in programming recommendations for students from 2014-2015 to 2015-2016, IBO focused on students who had been recommended a self-contained classroom in 2014-2015 and in the following year (2015-2016) were newly recommended a program other than a self-contained classroom; a similar methodology was applied for observing changes in recommendation from 2015-2016 to 2016-2017. Of those students, only 11.0 percent were subsequently recommended a classroom other than a self-contained classroom (and with more time with peers without a disability) in the following year.

School Factors. Availability of a self-contained classroom in the grade that students were entering was negatively associated with a recommended move out of a self-contained classroom. The student was 0.05 times as likely—or 0.95 times less likely—to be recommended for a move out of a self-contained classroom. Students for whom an ICT classroom was available in the grade they were entering were 1.4 times as likely to be recommended for a move out of a self-contained classroom.

Figure 13
Odds of School and Student Level Variables Associated With Students Recommended a Move Out of Self-Contained Classroom



SOURCE: Only results that are statistically significant at the 95 percent confidence level are shown. Orange bars denote school-level variables while blue bars denote student-level variables.
NOTE: IBO analysis of DOE data, school years 2014-2015 through 2016-2017.

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Student Factors. The student demographic factors that were most strongly associated with a recommended change out of a self-contained classroom were the grade the student was entering, and whether a student changed schools (for grades other than fifth in the prior year). Students entering higher grades (grades 5 and 6) were respectively 1.8 and 1.3 times as likely to be recommended a move out of a self-contained classroom compared with students entering first grade. In contrast, students entering grade 4 were 0.8 times as likely—or 0.2 times less likely—to be recommended a move out of a self-contained classroom.

Students who changed schools were 1.4 times as likely to be recommended for a move out of a self-contained classroom. This finding, similar to the finding in the previous section that a change in school was also associated with a move into a self-contained classroom, suggests an area for future research to better understand if a student changed schools because the option to move into or out of a self-contained classroom was presented, or if receiving schools took the opportunity to reevaluate students' recommended setting and make a change.

IBO found that students who were chronically absent in the prior school year and ELLs were less likely to be recommended a move out of a self-contained classroom (0.7 and 0.8 times as likely, respectively).

Finally, student's prior disability classification was significantly associated with a move out of a self-contained classroom, though in the opposite direction. Students who had a disability classification of Intellectual Disability, Emotional Disturbance, or Autism were 0.8 times as likely to be recommended a move out of a self-contained classroom compared with students with other types of disabilities. Across schools, the qualitative data demonstrated that staff were less confident in integrating students with more profound academic or behavioral needs in more inclusive settings.

Section 6
Tracking Students Over Five Years

The regression results presented here indicated that changing schools was strongly associated with both moves into and out of self-contained classrooms. In this last section, IBO tracks students over two additional years through the 2018-2019 school year—the last full year before the Covid-19 pandemic hit. IBO focuses on the 31,500 students who changed schools between 2014-2015 and 2018-2019, again utilizes a measure that reflects students' access to the least restrictive environment--the most frequent setting. While IBO found a greater degree of change in programming recommendations for students who changed schools, the majority of students were recommended the same most frequent setting four years later.

IBO found that about 63 percent of students with IEPs in 2014-2015 were recommended for the same most frequent setting four years later (compared with over 76 percent of the sample two years later). Students initially recommended for integrated co-teaching classrooms or self-contained classrooms were still more likely to be most frequently recommended for those same settings four years later (78 percent and 61 percent, respectively). For the students initially recommended for self-contained classrooms, 61 percent continued to spend no time with their peers without disabilities over five years and after moving to a new school.

Figure 14
Over 60 Percent of Students Recommended for Integrated Co-Teaching or Self-Contained Classrooms in 2014-2015 Who Changed Schools by 2018-2019 Were Recommended the Same Setting

	Most Frequent Setting Recommendation, 2018-2019				
	General Education Classroom				
Most Frequent Setting Recommendation, 2014-2015	Related Services Only	Special Education Teacher Support	Integrated Co-Teaching Classroom	Self-Contained Classroom	Total
Related Services Only in General Education Classroom	40%	14%	39%	7%	100%
Special Education Teacher Support Services in General Education Classroom	5%	32%	53%	9%	100%
Integrated Co-Teaching Classroom	4%	5%	78%	13%	100%
Self-Contained Classroom	5%	2%	32%	61%	100%

SOURCE: IBO analysis of DOE data, school years 2014-2015 through 2018-2019
NOTE: Students with IEPs attending DOE schools for all three years.

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Conclusions

Eighteen percent of students in the sample had an IEP, among the 360,400 students in grades kindergarten through fifth attending elementary schools in the 2016-2017 school year. The majority of the roughly 63,000 students with IEPs in this sample were classified with Speech and Language Impairments (48.5 percent) or Learning Disability (31.1 percent). Consistent with the 2011 special education reform incentives, students with IEPs overall were more likely recommended for an ICT setting, but there were some differences by classification—students with emotional disturbance, autism, and intellectual disability were more likely to be recommended self-contained classes which meant no time at school spent with peers without disabilities. This provides some evidence that students with behavioral challenges and more severe learning disabilities are more likely recommended a more restrictive environment. IBO also found that flexible programming and paraprofessional usage—ways for students to access more inclusive settings—happen relatively infrequently.

Observations of a select number of Pupil Personnel Team meetings highlighted that special education can be a catch all for students struggling with different challenges (academic needs, behavioral problems, socio-emotional burdens). Identifying students to be evaluated for special education requires diagnostic sophistication, interventions, ongoing data monitoring and assessment, and time to assess and manage. Lack of consistent academic and behavioral interventions raised questions about how teams could ensure sufficient consideration was given to the the continuum of alternative placements, and also raised questions about the link between a lack of interventions in the general education setting and an increase in referrals for special education evaluations. While the meetings showcased the ways that education professionals collaborate to serve children, the absence of general education staff in the meetings was striking. Without general education teachers in discussions with special educators about students considered for referrals, it was not clear how school teams would be able to consider the full continuum of the least restrictive environment.

Observations of a select number of School Implementation Team meetings demonstrated that staff were more likely to discuss existing availability of special education programming and services and were constrained in considering and arranging alternative programming options. Some of those constraints seemed insurmountable—especially limited staffing, space, and budget. But it was also evident that school teams needed more support and time in reviewing the appropriateness of the programming recommendations, tracking and assessing student progress, and figuring out how to utilize the resources they do have. Schools were not confident that sufficient supports could be provided to students in inclusive settings, especially for those with behavioral challenges. While each school could point to at least one case of successfully moving a student to a less restrictive environment, limitation of time with peers without disabilities or the toll of separation was not a concern that staff weighed either primarily or heavily in the meetings observed.

When IBO tracked students' recommendations over the three years, and subsequently over two more years, there was not much change for most frequent programming. More than three quarters of the students in the sample were recommended the same programming two years later. These findings along with the findings from the school meetings raise questions about how students' progress is being accounted for in decision-making. Looking specifically at those students who were newly recommended a self-contained classroom, IBO found that those changes are associated with both student- and school-level factors. The factor most strongly, and positively, associated with a move into a self-contained classroom was the availability of a self-contained classroom at the grade the student was entering. The availability of an ICT classroom was negatively associated with a move into a self-contained classroom, though to a smaller magnitude than the availability of a self-contained classroom. These results provide more evidence that changes in programming are susceptible to program availability despite the fact that the legal framework of fulfilling students' IEPs assumes that every school can implement the IEP as written.

At the student level, a student's prior year suspension, prior year disability classification, and English Language Learner status were all significant and positively associated with a recommended move into a self-contained classroom. Black students and those who changed schools were both significantly more likely to be recommended a self-contained classroom.

IBO also notes student- and school-level factors associated with changes for those students no longer recommended a self-contained classroom. Special education program availability was more significantly associated with a student's recommended move out of a self-contained classroom than student level factors. Interestingly, the availability of self-contained classrooms was more strongly and negatively associated with a move out of a self-contained classroom—suggesting a higher likelihood of a student's remaining in that setting even with the availability of an ICT classroom. Students entering higher grades (grades 5 and 6) and those who changed schools were more likely to be recommended for a move out of a self-contained classroom. Yet those with a prior year disability classification of intellectual disability, emotional disturbance, or autism were less likely to be recommended for a move out of a self-contained classroom.

Because changing schools was significantly associated with recommended moves into and out of a self-contained classroom, IBO tracked those students who changed schools for an additional two years (allowing us to examine programming recommendations for those students for a total of five years). The majority of students in this more extensive analysis were recommended similar most frequent settings, and either the same amount or less time spent with peers without disabilities. Those initially recommended for the most restrictive settings and no time with peers were recommended the same four years later.

While the provision of special education in New York City has more work ahead to ensure appropriate supports in the least restrictive environment are provided to all the city's students who need them, arguably, the provision of additional supports within the general education setting might have an even longer way to go. One question this study raises is who is referred to special education in the first place. A second question this study raises is under which conditions students can move to less restrictive environments within special education. Schools in this sample expressed the need for supports to provide appropriate interventions (academic and behavior) in general education classrooms; they also need support in ongoing monitoring and assessment. A closer look at which students are recommended self-contained classrooms is warranted, as the odds of exiting such classrooms for a less restrictive setting are quite low. Certainly, the definition of least restrictive in and of itself is up for debate, as for some students, the self-contained classroom was considered the least restrictive and most appropriate. That said, students who are recommended self-contained classrooms appeared to be recommended to stay there, especially as they remained in the same school. A change in school was found to be the most significant predicator of a change in programming recommendation, likely due to a change in setting availability and/or potentially due to a different process and lens.

More and varying programming options at each school hold the potential to provide multiple and shared pathways to meet students' multi-dimensional and developing needs. Greater offerings at all schools can reduce the likelihood of excluding groups of students from accessing curriculum and socialization that is more readily available to their peers without disabilities. Greater inclusion can also benefit those without disabilities and foster a greater understanding of differences in learning styles among all students. Investing in general education and integrated classrooms to meet students' evolving and diversified needs may hold the greatest potential to achieve high-quality special education.

Appendix A

Explanation of Funding for Students with Disabilities in Fair Student Funding Formula

Funding for students with disabilities is included in the New York City weighted student funding formula for schools, called Fair Student Funding. Funding is provided based on the frequency by which students receive special education services and by the intensity of the setting.

Frequency is based on the percent of time per week that students received special education services:

- Less than 20 percent is considered low frequency (spending 80 percent or more of their time with peers without disabilities).
- Between 21 percent to 59 percent, inclusive, is considered medium frequency (spending more than 40 to 80 percent of their time with peers without disabilities).
- Greater than 60 percent is considered high frequency (spending less than 40 percent of their time with peers without disabilities).

Among students in high frequency settings, students in primarily self-contained settings are considered in high intensity settings (spending little or no time with peers without disabilities) whereas students in primarily ICT settings are considered in low intensity settings (spending most or all of their time with peers without disabilities).

Figure A1
Complete Logistic Regression Model Results

Independent Variables	Move Into Self-Contained Classroom		Move Out of Self-Contained Classroom	
	Maximum Likelihood Estimate	Odds Ratio	Maximum Likelihood Estimate	Odds Ratio
Intercept	-4.8***		0.86**	
School Variables				
Suspension Rate	0.51	1.67	-1.52	0.22
Percent Students from Low-Income Neighborhood	-0.06	0.94	-0.08	0.92
Percent Black + Percent Hispanic	-0.17	0.85	-0.09	0.92
Number of Students in the School	0**	1	0	1
Percent of Students with an IEP	-0.08	0.92	-0.26	0.78
Integrated Co-Teaching Classroom Available	-0.37***	0.69	0.36***	1.44
Self-Contained Classroom Available	2.24***	9.4	-3.03***	0.05
Student Variables				
Race				
Male	0.06	1.06	-0.03	0.97
Black	0.58***	1.79	-0.14	0.87
Hispanic	0.25**	1.28	-0.06	0.94
Asian	0.07	1.08	0.11	1.11
Other Ethnicity	0.36*	1.43	-0.14	0.87
English Language Learner Status	0.66***	1.93	-0.25***	0.78
Student identified in Temporary Housing	0.07	1.08	-0.07	0.93
Student identified as living in a low-income neighborhood	0.1^	1.11	-0.03	0.97
Chronically absent in previous school year	0.55***	1.73	-0.32***	0.73
Suspended in previous school year	0.83***	2.28	0.18	1.2
Prior year disability classification of ID, ED, or Autism	0.67***	1.96	-0.21***	0.81
Grade Students is Entering				
Went Into Grade 2	0.03	1.03	0.15	1.16
Went Into Grade 3	-0.04	0.96	0	1
Went Into Grade 4	-0.23**	0.79	-0.19*	0.83
Went Into Grade 5	-0.69***	0.5	0.61***	1.84
Went Into Grade 6	-0.16	0.85	0.3**	1.35
Data from Student Going into 2016-17 SY	0.35***	1.42	-0.29***	0.75
Student changed schools	0.58***	1.79	0.34***	1.41
Maximum-rescaled R-Square	0.105		0.1215	
Number of observations	74,687		33,148	

SOURCE: IBO analysis of DOE data
NOTE: Significance levels are as follows: *** p<0.001, ** p<0.01; * p<0.05; ^ p<0.10.

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Appendix B
Qualitative Sampling for Special Education Least Restrictive Environment Study

IBO uses stratified random sampling to identify schools in which to conduct data collection for qualitative analysis.

Grade-Level: First, due to their prevalence in the data, IBO limited the sample to K-5 and 6-8 schools; IBO disregards PreK-8 schools, high schools, and schools with other grade configurations. See average IEP rates below (IEP rate = total # of students with IEP/total # of students in school).

Figure A2
School-Levels and Their Average IEP Rates

School Level	N Obs	N	Mean	Std Dev	Minimum	Maximum
1) Pre-K to 5	641	641	18.9	7.3	2.3	105.6
2) Pre-K to 8	147	147	25.8	22.1	3.6	109
3) 6-8	358	358	23.3	12.2	0.7	102.2
4) HS (9-12)	438	438	18.4	13.2	0.3	98.8
5) Other	80	80	51.3	40.3	1	106.5

SOURCE: IBO analysis of DOE data

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Percent IEP: Next, IBO stratified the sample into three groups based on their IEP rate within each grade configuration. To do this, IBO follows the normal distribution curve and identifies schools with rates below the 16th percentile as "low IEP" schools, those above the 84th percentile as "high IEP" schools and those that fall between these two measures as "medium IEP."

Figure A3
Average IEP Rates by IEP Strata Within Grade Configuration Strata

	K-5 % IEP BY TERCILE					
TERCILENORM_K5	N Obs	N	Mean	Std Dev	Minimum	Maximum
1	102	102	10.6	1.9	2.3	12.9
2	434	434	18.3	3	12.9	24.2
3	103	103	28	3.4	24.2	40.2

SOURCE: IBO analysis of DOE data

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Random Sample: With different aims for final sample counts across the grade levels IBO draws a different number of schools from each strata based on grade-level as displayed by the table below. IBO then compiles the total number of schools from the "preliminary random sample" into one dataset from which schools were recruited. Of 51 elementary schools invited, six agreed to participate. Three middle schools initially agreed to participate but did not follow through with scheduling observations.

Figure A4
Random Sample

Grade Level Configuration	Percent IEP Strata	Percent of Initial Sample	Preliminary Random Sample Number Schools Invited	Expected Response Rate from Random Sample	Goal Number Participant Schools
K-5	Medium	50%	25	16%	4
K-5	Low/High	25%	13	15%	2
K-5 Total		**100%**	**51**		**6-8 schools**
6-8	Medium	50%	7	16%	2
6-8	Low/High	25%	15	15%	1
6-8 Total		**100%**	**31**		**3-4 schools**

SOURCE: IBO analysis of DOE data

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Figure A6
Final Sample with IEP Strata and School Population Range

Participant	% IEP Strata	School Size Range
School 1	High IEP	Under 500
School 2	High IEP	600-900
School 3	Medium IEP	Above 900
School 4	Low IEP	600-900
School 5	Medium IEP	600-900
School 6	Medium IEP	Above 900

SOURCE: IBO analysis of DOE data
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Endnotes

[1]IDEA requires that schools (private, and public - districts and charters) serve students with disabilities with their peers without disabilities, to the maximum extent appropriate (34 CFR §300.114 (a)(2)(i)). Additionally, schools must ensure that a student with a disability is only removed from the general educational environment (including removal to separate schools or special classes) when the nature or severity of the student's disability is such that s/he cannot be educated in general education classes, even with the use of supplementary aids and services (34 CFR §300.114 (a)(2)).
[2] Report to Congress, 2015: https://nces.ed.gov/programs/digest/d17/tables/dt17_204.60.asp?current=yes
[3]Non-public schools include approved contract schools, carter schools, and traditional non-public schools in which students with disabilities are protected under 3602-c of New York State Education Law dual enrollment: http://www.p12.nysed.gov/nonpub/handbookonservices/dualenrollment.html
[4]Integrated Co-Teaching was formerly referred to as Collaborative Team Teaching. New York State regulations stipulate that a maximum of 12 students with IEPs may be placed in an ICT class and the number of students with IEPs may not exceed 40 percent of the total number of students in the class. NYS allows one additional student with an IEP in an ICT classroom with successful completion of a variance form.
[5]By the Education Department's accounting, more than 17 percent of students with disabilities, or nearly 32,000 students did not receive the kind of specialized instruction to which they were legally entitled to in the 2019-20 school year.
[6]Beattie, 1985; Gottlieb, Alter, Gottlieb, & Wisher, 1994; Hehir et. al, 2005; Harries, 2009. See also the Report of the Least Restrictive Environment Coalition (2001): https://advocatesforchildren.org/wp-content/uploads/2024/02/still_2001.pdf
[7]While operational since 2011, DOE's vision of using Special Education Student Information System (SESIS) to support full implementation of special education services for students did not materialize. Difficulties with functionality, data storage and cross system communication have hampered SESIS' ability to track compliance, generate key special education metrics and reports, as well to monitor provision of related services eligible for Medicaid reimbursement. In February 2019, DOE announced it would be replacing the SESIS system, see: https://www.edweek.org/ew/articles/2019/03/13/nyc-shelving-troubled-special-education-data-system.html
[8]https://www.jdsupra.com/legalnews/board-of-regents-replaces-the-term-2502168/
[9]https://infohub.nyced.org/partners-and-providers/special-ed-partners/standard-operating-procedures-manual
[10]In rare cases a student can receive both related services and SETSS, but not simultaneously. Because the data set used in this study only included students receiving services who received those services in a general education setting, those receiving related services and SETSS are not part of the sample.
[11]A student in a D1-32 school may be in self-contained classes "full-time" for all academic classes but will interact with peers without disabilities during lunch or time spent in hallways or gym. In contrast, students in a D75 school, even one that is co-located, generally do not interact with any peers without disabilities as it is an entire school of children with disabilities.
[12]U.S. Department of Education, Office of Special Education and Rehabilitative Services & Office of Special Education Programs. (2018). 40th Annual report to Congress on the implementation of the individuals with disabilities education Act 2018, Exhibit 31, p. 55. This report highlights that "only 17 percent of students reported under the category of intellectual disability and 13.7 percent of students reported under the category of multiple disabilities were educated inside the regular class 80% or more of the day." Thirty nine percent of students with autism and 47.2 percent of students with emotional disturbance were educated inside the regular class 80% or more of the day.
[13]Giangreco, M. F., Halvorsen, A., Doyle, M. B., & Broer, S.M. (2004). Alternatives to overreliance on paraprofessionals in inclusive schools. Journal of Special Education Leadership, 17(2), 82-90; Giangreco, M. F., Suter, J. C., & Hurley, S. M. (2013). Revisiting personnel utilization in inclusion-oriented schools. Journal of Special Education, 47,121-131.
[14]Mandated members of the IEP team include a school administrator or a school district representative; the child's current classroom teacher (for a student already receiving special education, this must be a special education teacher of the student); a psychologist or someone who can interpret evaluation results; the student's parent; and the student if over the age of 18.
[15]Certain other individuals including teachers and other professional members of DOE staff are authorized to make a request for referral for an initial evaluation to the principal or chairperson.
[16]http://www.p12.nysed.gov/specialed/RTI/guidance-oct10.pdf
[17]Although the data do not identify when IEPs are formally reviewed, as required by law, IBO can assess whether teams make changes in recommendations for their students who continue to have an IEP..
[18]Changing schools defined as a different DBN at the end of the next school year.