Four Simple Ways
to Improve New York City School Data

A flood of data is re-shaping American public education, nowhere more than in New York City. With 1.1 million public school students and a decade-long emphasis on accountability for quantifiable results, NYC has become a hotbed of school data analysis and debate—about inputs and outputs, test scores and demographics, and even relatively exotic measures like the "peer index."

Though it may seem that there are data about *everything* in NYC public education, some important gaps remain. **There are still key topics in NYC education debates where the critical data are not publicly available, or do not exist at all.** This paper describes four ways to remedy that, so that critical topics in education policy—including charter schools—can be addressed with data that go beyond anecdotes.

Because data reporting is already burdensome for schools, **any changes to data systems must protect school staffers' *time*.** The four proposals presented here would place no added burden on schools, and would carry a low resource cost to city and state agencies, whose staff are also stretched thin.

The ideas in this paper emerged from the New York City Charter School Center's work to develop our first-ever report on *The State of the NYC Charter School Sector*, which gathered the most recent charter school data from a range of public sources. Each proposed improvement could be accomplished quickly and efficiently, yet would shed light on a topic of energetic public debate. We hope city and state officials will consider them carefully.

About the Charter Center
The New York City Charter School Center envisions a future in which all of New York's students have access to a first-rate public education, so that, no matter their background, they can participate in society on fair terms. We believe that charter schools are partners in a larger effort to build and maintain a great system of public schools. We help new charter schools get started, support existing schools, and build community support so that highly effective schools can flourish.

About the Data Transparency Initiative
This report is part of a multi-year effort to promote data transparency within New York City's charter school sector. To explore other available data and analysis, visit www.nycCharterSchools.org/Data

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1. Create a clean measure of student mobility.

One outcome worth tracking for any school is its student mobility: the pattern of enrolled students entering and/or leaving the school over time, before graduation. Allegations of heavy and/or selective out-mobility ("attrition") are leveled most often against charter schools, although seasoned observers have raised similar concerns about parts of the district school system. Unfortunately, none of the publicly available data sets about NYC schools includes a clean measure of student mobility.

Confusingly, there are public data that *seem* to measure student attrition, but do not. One misleading measure is the size of a school's grade-level cohorts. If there were 50 students in grade four one year, but only 40 students in grade five the next year, some analysts have assumed that ten students left the school (a 20% attrition rate). In fact, it could be that zero students left the school, but ten students were retained in grade 4,[1] or that all 50 students left and were replaced by 40 new students.

Another "non-measure" of attrition is the number that appears on every school's New York State Report Card as "Student Stability." Despite its name, this number does *not* reflect how many students enrolled at one time were still enrolled later. Instead, the Stability Index starts with fall enrollment and looks *backward* to only the previous spring for only the oldest grade level, calculating how many students are new since the state exams were administered. By this formula, a school that loses 50% of its students over the summer, but does not enroll any new students, will have a perfect score for "Stability."

The lack of a clean mobility measure is a glaring gap in New York's education data. Without it, even responsible observers are left to decide which anecdotal claims to believe. Too often, that uncertainty means that high-performing schools' results are reflexively discounted, reducing the potential for their successful practices to spread. Fortunately, a basic fix is possible: the New York State Education Department (NYSED) should calculate and report a new measure of "Annual Student Out-Mobility" at each district and charter school. This number would represent the percentage of students who were enrolled at each school in one fall, who were not enrolled in the following fall (and who did not graduate). This is well within NYSED's technical capacity; in fact, the Department is already calculating certain attrition rates in order to assign retention targets to charter schools.

In the long term, New York needs a comprehensive data system that can answer detailed questions about student characteristics, such as the academic characteristics of students who leave a particular school compared to their classmates who remain. Until such a system is created, however, adding a clean measure of fall-to-fall attrition to the State Report Card would establish a decent baseline where real data is long overdue.

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[1] That retention, in the example above, would not necessarily cause a "bulge" in grade 4 enrollment, either, as some fourth-graders may have been retained as well.

PROBLEM:
No clean data on student mobility

PROPOSAL:
Calculate "Annual Student Out-Mobility" and report via State Report Cards

NEW COST TO NYSED:
Low

NEW REPORTING BURDEN ON SCHOOLS:
None

Without a clean measure of student mobility, anecdotal claims loom large.

2. Report on multiple dimensions of special education.

Federal law requires that a student receiving special education services be placed in the "least restrictive environment" possible. That standard leaves plenty of room for interpretation and controversy. The New York City Department of Education (NYC DOE), citing low achievement among its students in restrictive settings, is now implementing aggressive reforms meant to move many students to less restrictive settings. New York charter schools, meanwhile, have been criticized for not offering services in restrictive *enough* settings for some students, and are presently seeking legislation to give them more flexibility to do so.

Despite the important distinctions between different part-time and full-time special education services, most publicly available data only includes overall special education rates. NYC DOE's Progress Reports also report students' movement toward less restrictive services, but moves in the opposite direction are not reported.

Given the changing shape of special education in New York City, at both district and charter schools, an informed public debate will require some additional detail. Fortunately, NYC DOE is also building out its new Special Education Student Information System (SESIS), which promises to increase data accuracy and accessibility for district and charter school leaders. NYC DOE should, as part of its annual Progress Report data release, extend some of this improvement to the public debate by collecting and publishing at least:

- percentages of students at each school receiving different *types* of special education and related services;
- percentages of students at each school receiving services at different *frequencies*;
- percentages of students at each school whose parents *refuse* services; and
- student movement toward *more restrictive* environments for special education.

Each of these variables is already reported by schools through SESIS or, in the case of student movements, possible to calculate based on what schools report. It may be necessary to phase-in this reporting as SESIS becomes fully operational. Also, the service type and frequency data may need to be grouped into tiers to simplify reporting and protect student confidentiality.

Ultimately, however, the fact remains that distinctions and movements within special education are now the subject of serious reform efforts and intense debate. Simply reporting how many students are in special education of any kind is no longer sufficient.

*Distinctions and movements **within** special education are critical to understand.*

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3. Report students' progress with and without 'extra credit' for disadvantage.

NYC DOE places great weight on its system of school Progress Reports, which use a complicated formula to assign a score and letter grade to each public school, district or charter. The academic component of the formula reflects three basic factors: students' academic achievement on state tests, in absolute terms; students' academic progress over time; and students' demographic characteristics.

A little-recognized complication, however, is that the "progress" component includes its *own* adjustments for demographics. Extra progress points are added for students with disabilities, based on the expectation that they will make progress more slowly than other students. Progress scores are also adjusted for each school's share of students who are eligible for the federal Free or Reduced-Price Lunch program.

An adjusted measure of progress may be necessary to ensure fairer school comparisons, but it fails as a means of transparency since the actual progress made at each school is not publicly reported. As a result, educators and families can easily draw mistaken conclusions, while the plain data about students' progress are obscured.

NYC DOE should publish its Progress Report data on students' academic progress both with and without demographic adjustments, so both lenses can be available to the public.

PROBLEM:
NYC DOE reports academic "progress," but only after adding points for student characteristics

PROPOSAL:
Report unadjusted figures also

NEW COST TO NYSED:
Low

NEW REPORTING BURDEN ON SCHOOLS:
None

Few realize that "student progress" scores reflect lower expectations for certain students.

4. Track and report graduates' college majors.

Through a pioneering data-sharing and research partnership with the City University of New York (CUNY), NYC DOE now tracks how its graduates perform in the state college system, to evaluate the fruits of its college-preparation efforts. Although the partnership has yielded valuable insights about patterns of enrollment, remediation, and degree attainment, so far there has not been research made public about an essential variable: NYC DOE graduates' choices of college major.

Majors matter. Although any degree typically confers an economic advantage, graduates can (statistically) expect considerable differences in employment prospects and salary, depending on their major. Today's NYC DOE graduates enter college in a time of economic uncertainty, when tuition costs are rising and education leaders are emphasizing Science, Technology, and Mathematics (STEM) fields—which can be higher paying but require especially rigorous K-12 preparation.[2]

In that context, it only makes sense to see which majors NYC DOE graduates choose, which majors they migrate away from, and how K-12 preparedness may be affecting those choices. NYC DOE should work to expand its data-sharing relationships with CUNY and the National Student Clearinghouse to include college majors and other rich detail. Researchers at NYC DOE and CUNY should then investigate these topics and publicize their findings, including any evidence about how K-12 mathematics achievement influences choice of college major.

Data on graduates' college majors could shed light on their K-12 preparation.

[2] Not even all STEM concentrations are equally rigorous or economically rewarding, which underscores the need for detailed analysis. For example, Carnevale *et al*. find that employment rates are higher for "people who invent computer technology" (e.g. Computer Science majors) "as opposed to people who use computer technology" (e.g. Information Systems majors). See Carnevale, A.P., Cheah, B., and Strohl, J. (2012). *Hard Times: College Majors, Unemployment and Earnings* Washington, DC: Georgetown University Center for Education and the Workforce. p. 4. Web. 18 June 2012. http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/Unemployment.Final.update1.pdf

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