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## NEPC REVIEW: *NEW YORK CHARTER SCHOOLS OUTPERFORM TRADITIONAL SELECTIVE PUBLIC SCHOOLS: MORE EVIDENCE THAT CREAM-SKIMMING IS NOT DRIVING CHARTERS' SUCCESS*

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### Summary of Review

A common argument leveled against charter schools is that they attract the most motivated and intelligent students from already struggling public schools. Marcus Winters seeks to examine this claim, known as “cream-skimming,” by comparing the performance of New York City’s (NYC) charter middle schools with a set of traditional selective public middle schools, which admit students on the basis of prior performance. Findings indicate that, controlling for student characteristics, charter schools perform no differently in English Language Arts (ELA) and significantly better in math than selective schools. Based on this, the report concludes that the success of NYC charter schools cannot be explained by cream-skimming. While on its face this conclusion may seem logical, the report suffers from two primary flaws. First, it assumes that selective school applicants are higher performing and more motivated than charter school applicants. This is unlikely to be the case because all students are required to apply to traditional middle schools in NYC, while applying to a charter school requires navigating an additional application process. Second, the report relies on a single year of data to make comparisons of ill-defined and inappropriate outcomes—an approach that does not address either the question of cream-skimming or charter school success. As an evaluation of cream-skimming in charter schools, this report misses the mark.



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## I. Introduction

Both lauded as bastions of educational opportunity for students slated to attend low-performing public schools and maligned as a move toward the privatization of public education, perhaps no other current school reform is more hotly debated than charter schools. As schools of choice funded through taxpayer dollars, there is intense public interest in the effectiveness of these schools as well as their impact on the larger school systems in which they operate. Proponents argue that charter schools are an integral part of school reform because they benefit not only charter school students, but also students attending nearby traditional public schools, which respond to increased competition for students by improving practices.<sup>1</sup> Opponents, however, argue that charter schools drain the most motivated students (known as “cream-skimming”) and resources from already struggling public schools, leaving them worse off and creating the potential for a segregated system where traditional public schools are left serving the most disadvantaged students.<sup>2</sup> This ongoing debate has become more heated under the Trump administration’s agenda to drastically expand school choice, including charter schools.<sup>3</sup>

Despite over a decade of empirically sound research, however, the evidence suggests that the effectiveness of charter schools, like traditional public schools, is highly variable and often depends on contextual factors such as location (i.e. urban versus suburban) and state policy.

In *New York Charter Schools Outperform Traditional Selective Public Schools: More Evidence that Cream-Skimming is Not Driving Charters' Success*, Marcus A. Winters explores the question of whether the success of New York City (NYC) charter schools can be explained by cream-skimming.<sup>4</sup> The largest school district in the country, NYC educates over one million students annually, and offers a robust system of school choice to its middle school students including 73 charter schools. At the end of fifth grade, all NYC public school students are required to apply to at least one middle school. This includes a set of selective unzoned schools that base admissions on students’ academic records including prior performance, report cards, and attendance, as well as a set of unselective schools that rely on other criteria such as residence zones, attendance at an information session, and talent tests. In addition to applying to traditional public middle schools, students can apply to a set of charter middle schools, which are open to all students across the city regardless of prior performance. It is

against this backdrop that the report examines the question of cream-skimming in NYC charter schools.

## II. Findings and Conclusions of the Report

In order to evaluate claims that the success of NYC charter schools is driven by the characteristics of the students who attend them, the report compares the demographics and performance of charter, selective traditional public, and unselective traditional public middle schools in NYC using data from 2013-14 NYC School Quality Reports (SQR).

Of the 585 middle schools in NYC, the report identifies a set of 73 charter schools, 94 selective traditional public schools, and 418 traditional nonselective public schools that have SQR data in 2013-14. Results indicate that compared to selective schools, charter schools serve populations with higher shares of economically disadvantaged and minority students, while both selective and charter schools serve lower shares of such students as compared to nonselective public schools. Selective schools, however, serve higher shares of students with disabilities and students in self-contained classrooms as compared to charter schools.

Students enrolled in charter schools perform significantly worse in ELA and no differently in math as compared to selective schools, and both charter and selective schools outperform the set of nonselective schools in both subjects. Given that charter, selective, and nonselective middle schools serve significantly different populations of students, however, these average differences may reflect differences in student composition across different types of schools, rather than differences in school effectiveness.

Therefore, a second set of results is presented, which accounts for various school-level characteristics including racial composition, free and reduced price lunch eligibility, and special education status. Accounting for these differences in student demographics, charter and selective schools perform no differently in ELA and charters outperform selective schools in math. For example, adjusted for student characteristics, the average math proficiency rate in charter schools is 11 percentage points higher than in selective schools and 15 percentage points higher than in unselective public schools.

The report concludes that these findings “cast serious doubt on claims that New York charters flourish primarily by attracting the brightest, most motivated students.”<sup>5</sup>

## III. The Report’s Rationale for Its Findings and Conclusion

Underlying the conclusions of this report is the assumption that if enrolling the best and brightest students is the key to school success, then selective middle schools, which explicitly admit students based on prior performance, should outperform charter schools, which

are open to all students regardless of prior performance. To the extent that charter schools perform as well or better than selective schools, this should indicate some value-added by charter schools.

#### **IV. The Report's Use of Research Literature**

Despite a rich body of evidence on the topics of both cream-skimming and charter school performance, the report cites only one scholarly publication on the effectiveness of charter schools in New York City, which relies on data from oversubscribed charter schools (i.e., charter schools where demand for seats is greater than supply).<sup>6</sup> At least two other studies document the effectiveness of NYC charter schools as compared to traditional public schools using rigorous methods that are designed to compare the outcomes of students who attend charter schools to similar students who attend traditional public schools, although these are somewhat dated.<sup>7</sup> The report fails to acknowledge any of the larger literature on charter school effectiveness, which is incredibly mixed. For example, lottery-based estimates of oversubscribed charter schools tend to find large positive effects<sup>8</sup>, other studies find negative or no significant effects<sup>9</sup>, and still others find that charter school student performance decreases in the initial years of attendance but then later catches up to that of their public school peers.<sup>10</sup> Perhaps most relevant to this particular report, a recent national study of oversubscribed charter middle schools from Mathematica finds that, on average, charter school students tend to perform no differently or slightly worse than their public school peers.<sup>11</sup>

The report also neglects to cite any prior research on cream-skimming in charter schools. In general, this literature tends to find little empirical evidence that charter schools students are systematically higher performing than their peers in the years before they enroll in charter schools.<sup>12</sup> There is evidence, however, that charter schools may engage in practices designed to attract and retain a higher performing and/or more motivated student body such as requiring student and family commitments to longer school days and years, retaining low-performing students in grade, harsh discipline practices, and discretion over how many students to enroll mid-year or in upper grades.<sup>13</sup>

#### **V. Review of the Report's Methods**

The methods employed in this report are descriptive, using a single year of data to make comparisons between middle schools that rely on different admissions criteria. The report employs a novel strategy by comparing the performance of charter schools with traditional selective public schools. For the purpose of evaluating claims that charter schools systematically enroll high-performing and motivated students, this is an improvement over many analyses that compare the performance of charter schools to all traditional public schools re-

ardless of admissions criteria. Indeed, such a comparison seems logical on its face—if high proficiency rates in charter schools merely reflect the tendency of high-achieving students to attend charter schools, then charters should be expected to perform similarly or slightly worse than selective schools. However, this logic relies on a set of strong assumptions regarding applicants to charter and selective schools as well as good measures of what constitutes a selective school. Furthermore, properly addressing the question of cream-skimming requires the use of longitudinal, individual-level data.

## Assumptions

The assumption that students who apply to and are admitted to traditional selective public middle schools are higher performing than both charter school students is questionable for at least two reasons. First, charter schools and selective schools are located in very different areas of the city—for example, 15 of the city’s 73 charter middle schools are located in community school districts (CSDs) without any selective school and the majority (43) are located in CSDs with two or fewer selective schools.<sup>14</sup> Given the long line of research documenting the importance of distance when selecting a school, it is plausible that charter school applicants who do not live close to selective schools are disproportionately comprised of high-achieving students who do not want to travel long distances to attend a selective school, but would prefer to opt out of their zoned school.<sup>15</sup> This is compounded by the fact that many selective schools are open only to students who reside within the CSD, such that high-achieving students in CSDs without a selective school can only apply to borough-wide or citywide schools where they will face more competition for slots. It is conceivable that such students might also apply to charter schools if they would prefer to opt out of their zoned school. A second problem with the assumption that students who apply to selective schools are more motivated than charter school students is that while all fifth graders in traditional public schools are required to apply to at least one middle school, students interested in applying to charter schools must undergo an entirely separate application process. This would suggest that charter school applicants may come from slightly more motivated families who are willing and able to fill out multiple applications, as compared to those students who only apply through the mandated public school choice process.

## Measures

The definition of what constitutes a “selective” school is never clearly spelled out in the report, but upon further inspection, it appears to include only those schools designated as “selective” or “composite score”, which incorporate measures of prior performance. This definition of selective, therefore, include the set of at least 17 other traditional public middle schools that use a separate application process but still use academic admission criteria, such as The Anderson School and the Lab School, nor does it account for any of the numerous gifted and talented programs which are application-based and housed within nonselective traditional public schools. To the extent that students in these schools and programs

may represent a more or less “selected” group, the estimates of selective school performance may be biased.

The two primary outcome measures in the report, school-wide proficiency and adjusted growth percentile, are also ill-defined and inappropriate for evaluating either cream-skimming or charter school success. The first outcome, schoolwide proficiency rates, capture average levels of student performance at a single point in time and thus cannot account for students’ prior achievement or provide useful information regarding the value-added of attending a particular school. The second measure, adjusted growth percentile, is described in the report as a measure of “the school’s value-added contribution to student performance.” Upon closer inspection of the NYC Department of Education’s methodology, this is a gross oversimplification. In fact, this score represents the “growth” of the median student in each school after several adjustments are made to account student characteristics. Given that this measure is based on the median student, it is difficult to attach any meaningful interpretation to this outcome without knowing more about the full distribution of student growth scores. This is particularly the case because the documentation for the SQR fails to provide any explanation or justification for the adjustments that are made in the calculation of this score.

## Data and Analysis

Even if the assumptions regarding applicants to charter and selective public schools hold true and the issues with measurement are addressed, the data and analysis employed in this report are inadequate to address the question of cream-skimming, as its title implies. To truly examine the extent to which charter schools attract the highest performing public school students, three elements are necessary: First, the analysis would have to identify the set of schools that charter school students would attend if no charter schools existed (i.e. the counterfactual schools). Second, the analysis would need to employ longitudinal data with measures of student performance prior to attending any charter schools. Third, the analysis would need to compare the prior performance of students who attend charter schools to the prior performance of students who attend the set of counterfactual schools. The analysis employed in the current report fails to include any of these elements, instead relying on a single year of school-level data, examining the aggregate performance of students *after* they have enrolled in a charter or selective school, and comparing this to aggregate student performance in the universe of unselective NYC middle schools. Thus, analysis in the report does nothing to describe or account for prior student performance, which is at the heart of the cream-skimming issue, nor does it limit comparisons to the set of schools that charter school applicants would be expected to attend, which are likely quite different from the universe of all NYC middle schools. As a result, the results from this report cannot speak to whether charter schools engage in cream-skimming, a fact which is acknowledged at the end of the report.

Another serious concern with the methodology is that the report claims to make “apples to apples” comparisons between charter and selective schools. In reality, the models (which are

described in just two sentences with no further documentation or reference to a technical report) account for a limited set of observed differences between these two types of schools, ignoring many other characteristics that are likely to differ between charter and traditional public schools and may explain differences in aggregate student performance such as differential mobility rates (both into and out of schools), prior student performance, teacher effectiveness, class sizes, etc. While it is often impossible to account for all important differences between charter and traditional public schools, it is misleading to characterize the analysis in the report as making “apples to apples” comparisons.

## **VI. Review of the Validity of the Findings and Conclusion**

As noted earlier, the report comes to two primary conclusions. First, that: when “apples to apples” comparisons are made, charter schools perform better in math and equally well in ELA than selective schools. Second, that these findings should cast doubt on claims that the success of NYC charters can be explained by cream-skimming on the part of charter schools. Both of these claims overstate the report’s findings. While the analysis does account for important differences in student characteristics between charter and selective schools, many additional factors must be accounted for in order to conduct an “apples to apples” comparison. Furthermore, the conclusions regarding cream-skimming rest on a set of strong and questionable assumptions and inadequate data. While the author does acknowledge that “These findings do not prove the extent to which New York charters are responsible for their students’ success”, this statement is buried in the conclusion of the report.<sup>16</sup>

## **VII. Usefulness of the Report for Guidance of Policy and Practice**

The usefulness of this report for policy and practice is quite limited. If the goal is to address charter school critics regarding the effectiveness of charter schools, this report misses the mark. If such critics remain unconvinced by prior research, which uses rigorous methods to account for differences between charter and public school student composition, it is hard to see how this report, which analyzes one year of school-level data, would do so. Addressing the question of cream-skimming in NYC charter schools will require the use of longitudinal student-level data and much more rigorous methods.

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