Differences on Balance

NATIONAL COMPARISONS OF CHARTER AND TRADITIONAL PUBLIC SCHOOLS

NAT MALKUS

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Executive Summary

In the 25 years since the first public charter school opened its doors, charter schooling has grown from a novel reform idea into a permanent fixture in American public education. Today, charter schools constitute more than 1 in 14 public schools nationwide.

As their numbers have grown, so has the national debate surrounding them. Charter schools have support from diverse political groups and have proven popular with parents in many states, as evidenced by long waiting lists for available seats. However, opposition to charters has flared among those who see them as unfair competitors with traditional public schools because they operate under a different set of rules. Recently, that opposition has culminated in calls for a national moratorium on charter schools from groups including the NAACP.

The politicization of the national debate over charters is fueled by two very different narratives about what charter schools are and who they serve. Many supporters cling to a narrative that paints charters as hope-filled, quality school alternatives for the nation's most disadvantaged students. In contrast, many opponents portray charters as an unfair system of "public privates" that select the most advantaged students and drain resources from traditional public schools (TPSs).

It is not surprising that in a national debate both sides tend to oversimplify what charters are and who they serve. The conflicting narratives that result are largely due to the lack of solid, nationally generalizable evidence on charter schools' student selectivity. Numerous studies have compared charter schools to a matched set of TPSs, but those studies are limited in scope and do not generalize for charters across the nation. National comparisons of all charter schools and all TPSs attain a broader scope, but their lack of nuance means that the results can be misleading. Getting an accurate and holistic picture of charter student selectivity requires a valid means of comparing the student composition of charters and TPSs that can be applied nationwide. So far, that combination has remained elusive.

In this paper, I attempt to make meaningful national comparisons between the student compositions of charters and TPSs. Using national data from all public schools, charter and traditional, I match each charter school with its five nearest TPS neighbors. I then compare the student composition of charter schools to that of all TPSs and of the subset of TPSs that neighbor charters. These comparisons reveal important patterns of differences between charters and TPSs.

First, these findings show how important it is which TPSs are compared to charter schools. Many of the average differences between charters and all TPSs disappear when the comparisons are restricted to charters and their neighboring TPSs. Comparing charters to their neighboring TPSs shows that, on average, some common conceptions about differences in charters' student characteristics are correct, while others are errant.

Second, these findings demonstrate that beyond which TPSs are used, it is also important how they are compared to charter schools. Comparing averages can hide that charters' enrollments frequently differ from those of their neighboring TPSs. Examining the distribution of differences shows how often and by how much charters differ from their neighboring TPSs—and that they do not differ in uniform ways. These comparisons dispel some myths, confirm some differences, and reveal new ones, showing a diversity in charter schools that defies simple characterization.

Part I: How Are Charter Schools Different from Traditional Public Schools?

How are charter schools different from traditional public schools? The answer often depends on who you ask. In popular press accounts, newspaper opinion pages, online discussion boards, and even scholarly research, the national conversation on charters has become increasingly polarized.[1] The polarization of that conversation has been primarily driven by two very different narratives about what charter schools are and who they serve.

Depending on the narrative, charter schools might be painted as hope-filled alternatives for the most disadvantaged students, or as "public privates" that cherry-pick more advantaged students;[2] as operating in the public interest or as parasitic entities;[3] as particularly beneficial for minority students, or particularly detrimental;[4] as backed by remote private interests or by grass-roots heroes;[5] as competitors to traditional public schools (TPSs) or as their cooperative partners;[6] as instruments of "white flight," or not;[7] as using stricter disciplinary practices than TPSs to screen students,[8] or using less discipline than TPSs;[9] as increasing school segregation,[10] or as a key to integration;[11] and as a significant threat to public education,[12] or its best hope.[13]

Debate over charter schools has only increased during the past 25 years, as they grew from a novel idea to a permanent fixture in American public education. Today, more than 6,700 charter schools are operating in 42 states and the District of Columbia, educating 2.5 million students and constituting more than 1 in 14 public schools nationwide.[14] With no signs that growth is slowing, the charter sector has reached a scale from which there is no going back.

Charters' permanent and increasing profile underscores how important it is to clarify what charters are and how they differ from TPSs. Charter schools are public schools, and like TPSs, they are publicly funded, secular, and tuition free. Charter schools must admit all students who apply unless there are more applicants than available seats, in which case they admit students by random lottery. The key point of separation is that charters are independent entities—not operated by traditional school districts—which frees them from many of the regulations and constraints under which TPSs operate. Charters' independence allows them to offer specialized curriculum and unconventional learning approaches that may appeal to some students and not to others.

That independence can complicate comparisons between charters and TPSs. Such comparisons typically focus on how the outcomes of charter students compare to those of TPS students. But those comparisons are not so simple because the students in charter schools can differ from those in TPSs in ways that significantly influence outcomes. Research on student outcomes, which is not the focus of this report, has been mixed, showing some charters produce substantially better outcomes for comparable students, some produce worse outcomes, and many lie somewhere in between.[15] With no settled evidence on charter outcomes, the charter debate often focuses on how and why charter operators select and target students.

Diverging Views of Charter Student Selectivity

Charter critics frequently harbor broad suspicions that charter operators seek to cream-skim students. Under this view, charter operators use multiple means to skirt

legal requirements to accept all students,[16] as TPSs must, which results in a two-tiered school system in which charter schools systematically enroll more advantaged students. Skeptics believe charters enroll fewer historically disadvantaged students—in terms of poverty, race, English language skills, disabilities, or academic performance—relative to TPSs because these students are easier to educate. This view was clearly reflected in comments from Hillary Clinton in her campaign for the 2016 Democratic presidential nomination, when she said, "Most charter schools—I don't want to say every one—but most charter schools, they don't take the hardest-to-teach kids, or, if they do, they don't keep them."[17]

In contrast, charter proponents tend to view charter operators as mission driven to create opportunities for the least advantaged students. In this conception, operators strategically position and market charters to serve high-minority, high-poverty student populations—the same populations that TPSs have underserved—and use targeted educational approaches to help students who have been failed by TPSs. Some of the charter school movement's most recognizable brands, such as KIPP and Uncommon Schools, are specifically focused on serving these students.

Outsized voices on both sides of the debate tend to paint charters with a broad brush, but while those characterizations are contradictory, they are not mutually exclusive. Each may have a basis in fact but not be accurate on the whole. Getting an accurate and holistic picture of charter student selectivity requires a valid means of comparing the student composition of charters and TPSs that can be applied nationwide. So far, such an approach has remained elusive.

Developing a Valid National Approach to Compare Charter and TPS Students

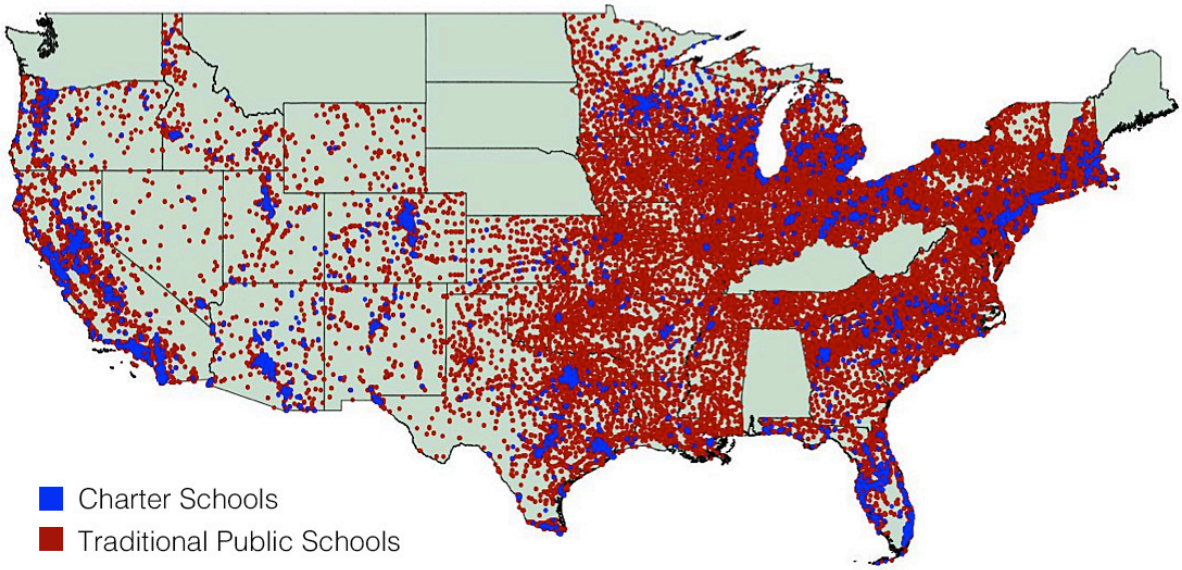
To date, there is no clear means to make national comparisons between the student compositions of charters schools and TPSs. Previous attempts to compare these groups of schools have had one of two problems: they have either been too narrow or too simplistic. Research has provided some evidence that student compositions of charters and TPSs differ substantially, frequently concluding that charters are more segregated by race, poverty, English language status, and disability.[18] Regrettably, the research that has made relatively nuanced comparisons has been limited in scope—covering specific cities or states—and provided too narrow an evidence basis to generalize about charters nationally. The research that has compared all charters to all TPSs nationwide has often forsaken nuance for scope, at the risk of being misleading.

The central problem for these comparisons is that TPSs are everywhere, as seen in Figure 1, while charter schools are clustered in specific locations (often urban ones). National comparisons conflate differences in the kinds of students choosing charters with differences in the kinds of students that live in places where charters are practical options. Any meaningful national comparison must be able to distinguish between these situations. The trade-offs between breadth and nuance in these two approaches become apparent when findings from localized studies contrast with those from national comparisons.[19]

In this paper, I attempt to make meaningful national comparisons between the student compositions of charters and traditional public schools. Using national data on all schools, I match each charter school with five neighboring public schools, which are the nearest five TPSs that a charter's students are most likely to otherwise attend. (See Appendix A for a detailed description of the database and the matching method.) By identifying charters' neighboring public schools, this matching system can uncover meaningful differences in student composition. If charter schools systematically enroll different kinds of students from TPSs, those differences should be evident by comparing the composition of charter schools not with all TPSs nationwide, but with TPSs whose students had the practical choice to attend a nearby charter school.

These comparisons accomplish three things that previous comparisons have been unable to do. First, they enable comparisons of all charter schools in the nation to all TPSs and to a subset of TPSs that charter school students might otherwise attend. The substantially different results from these comparisons highlight the importance of identifying an appropriate comparison group of TPSs. Second, they examine multiple measures of student composition—including race, poverty,

Figure 1. All TPSs and Brick-and-Mortar Charter Schools in States with Operating Charter Schools: 2011–12



Source: National Center for Education Statistics, Common Core of Data, 2011–12.

limited English proficiency, special education status, proficiency on state reading and math assessments, and out-of-school suspension rates—to paint a more complete portrait that might explain student selection differences. Third, they look beyond average differences between charter schools and their neighboring TPSs to reveal how often, by how much, and in what ways charter schools differ from TPSs.

The results of these analyses are presented in three sections, each of which builds on the prior section. The first section contrasts the national average characteristics of the three groups of schools—all charter schools, all TPSs, and the subset of TPSs that neighbor charter schools—to show how misleading oversimplified comparisons of charters and TPSs can be. There are stark differences between all charters and all TPSs, but most of those differences disappear when charters are compared to the TPSs that neighbor charter schools.

While the first set of results displays the importance of comparing charters to a subset of all TPSs, it assumes charters can be appropriately described in a uniform way. The second section reveals how average comparisons are misleading by examining the distribution of differences (see sidebar on page 8) between each charter school and its neighboring TPSs. The distribution of differences between charters and their neighboring public schools shows that charters' student compositions frequently differ from their neighboring TPSs by significant amounts, but not in uniform ways. For instance, on average, charters and TPSs have similar rates of student poverty, but many charter schools serve a much lower percentage of poor students than their neighboring TPSs, and just as many serve a far higher percentage. These distributions of differences are key to understanding how charter schools differ from TPSs in ways that are obscured when comparing average characteristics.

The final section underscores these differences by showing how frequently charter schools rank as the highest or lowest among their matching TPSs for multiple student characteristics. I show that charters frequently differ from their neighboring TPSs on numerous measures, by substantial amounts, but in more than one direction.

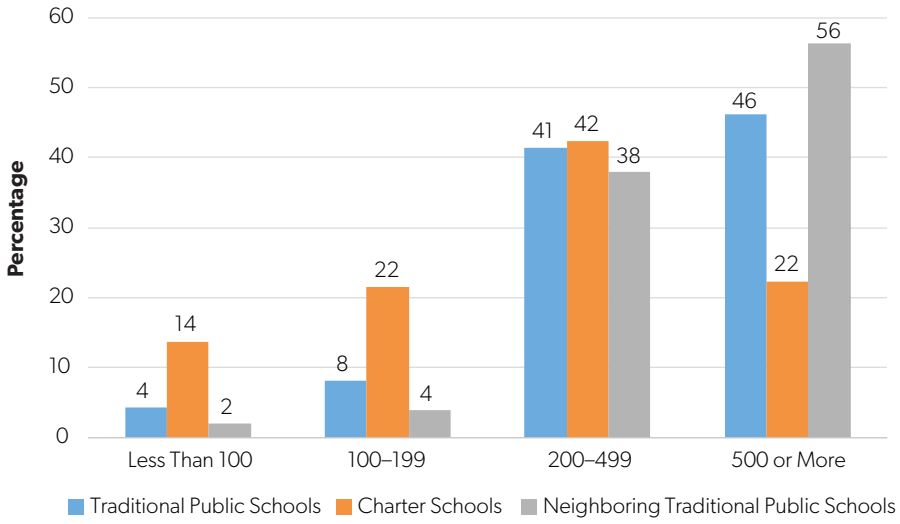
Comparisons of Charters Versus Traditional Public Schools and Neighboring Public Schools

Comparisons between all TPSs and all charters can lead to misleading conclusions about the nature of charter schools. This section demonstrates how they are misleading by displaying the average characteristics of all TPSs, all charter schools, and the subset of TPSs that neighbor charter schools (hereafter referred to as "neighboring public schools") side by side. The large apparent differences between all TPSs and charter schools often disappear when charters are compared to the neighboring TPSs, whose students might have a practical choice between sectors. These results demonstrate how important it is to compare charters to a matched set of TPSs.

Figures 2 and 3 show an important distinction between features that are characteristics of charter schools and features that are simply functions of where the schools are located. Figure 2 shows that charter schools tend to be smaller than TPSs and neighboring schools. Since many charter schools have existed for relatively short time periods and have enrollment caps, this should not be surprising.[20]

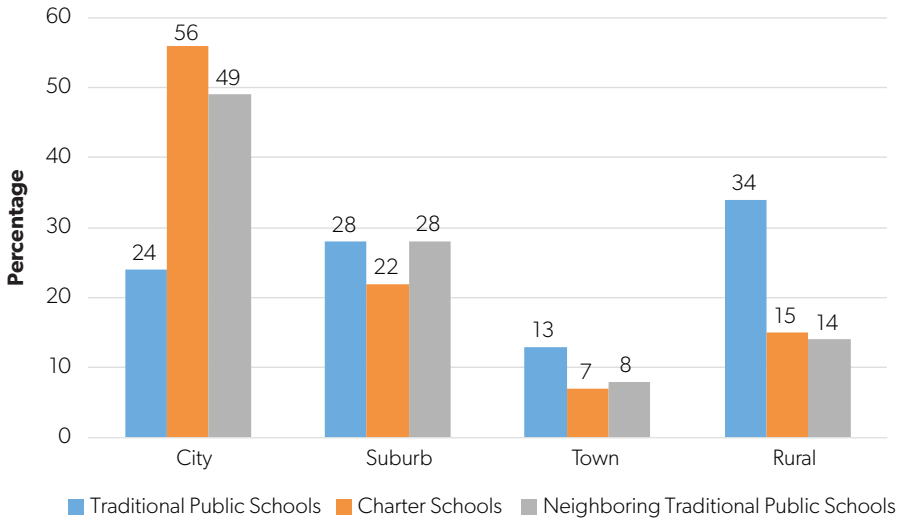
Figure 3 shows another unsurprising attribute of charters: they are often located in urban locales. However, the locale of neighboring TPSs is quite similar to charters, and both contrast with TPSs, which are more often rural. This pattern is expected because neighboring TPSs and charter schools are geographically matched. Size is a characteristic of charter schools, while locale is a function of where they are.

Figure 2. Percentage of Traditional, Charter, and Neighboring Traditional Schools, by Student Enrollment: 2011–12



Source: National Center for Education Statistics, Common Core of Data, 2011–12.

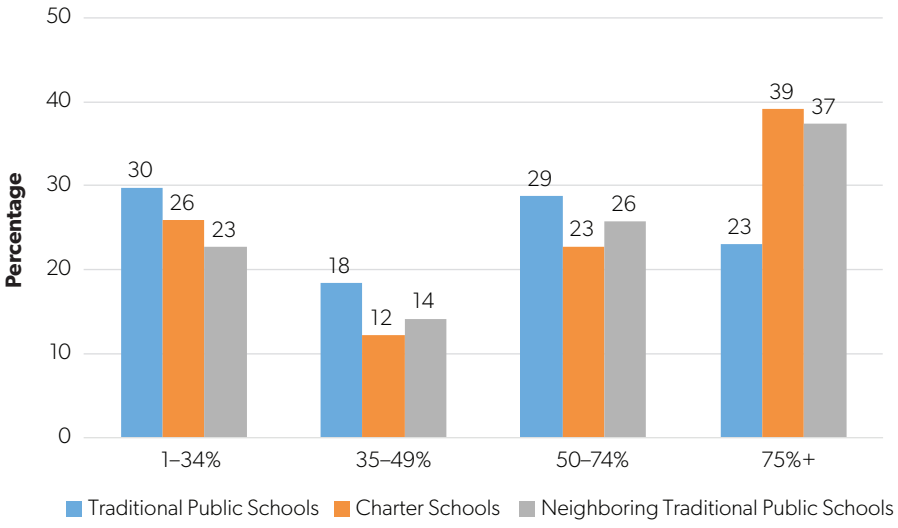
Figure 3. Percentage of Traditional, Charter, and Neighboring Traditional Schools, by Locale: 2011–12



Source: National Center for Education Statistics, Common Core of Data, 2011–12.

The importance of these patterns is clear in the percentages of student poverty, as measured by eligibility for free and reduced-price lunch.[21] In 2011–12, 39 percent of charter schools were high-poverty schools,[22] compared to just 23 percent of all TPSs (see Figure 4). On its face, this suggests charter schools enroll substantially more poor students than TPSs do. However, 37 percent of neighboring TPSs were high poverty, nearly identical to the percentage for charter schools. This suggests poverty is not necessarily attributable to charter schools as much as to the concentration of poverty where charters, and their neighboring public schools, are located.

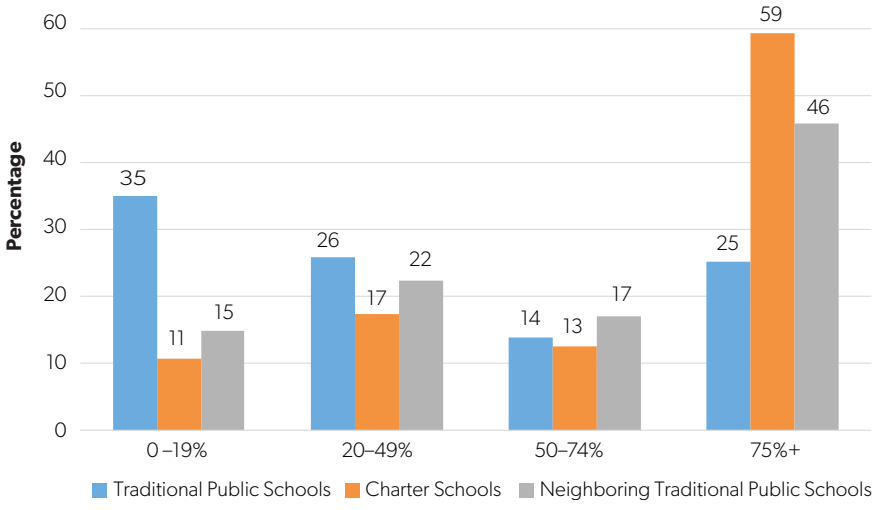
Figure 4. Percentage of Traditional, Charter, and Neighboring Traditional Schools, by Student Free and Reduced-Price Lunch Eligibility: 2011–12



Note: Schools reporting zero students eligible for free and reduced-price lunch were excluded from this table due to data-quality concerns for charter schools. See Appendix A for details.
Source: National Center for Education Statistics, Common Core of Data, 2011–12.

A similar pattern is evident for minority concentration: 59 percent of charter schools enrolled 75 percent or more minority students, compared to 46 percent of neighboring TPSs and only 25 percent of TPSs overall. In addition, far higher percentages of all TPSs enrolled less than 20 percent minority students compared to charter schools or their neighboring TPSs.

Figure 5. Percentage of Traditional, Charter, and Neighboring Traditional Schools, by Student Minority Percentage: 2011–12



Source: National Center for Education Statistics, Common Core of Data, 2011–12.

Not all student attributes are similar between charter schools and their neighboring TPSs. Figure 6 shows that half of charter schools had less than 10 percent special education students, which was twice the percentage for both groups of TPSs. In other words, charter schools are less likely to enroll special education students on average than all TPSs or neighboring TPSs are. For all rates of special education enrollment, charter schools are less likely to serve students with special needs compared to TPSs.

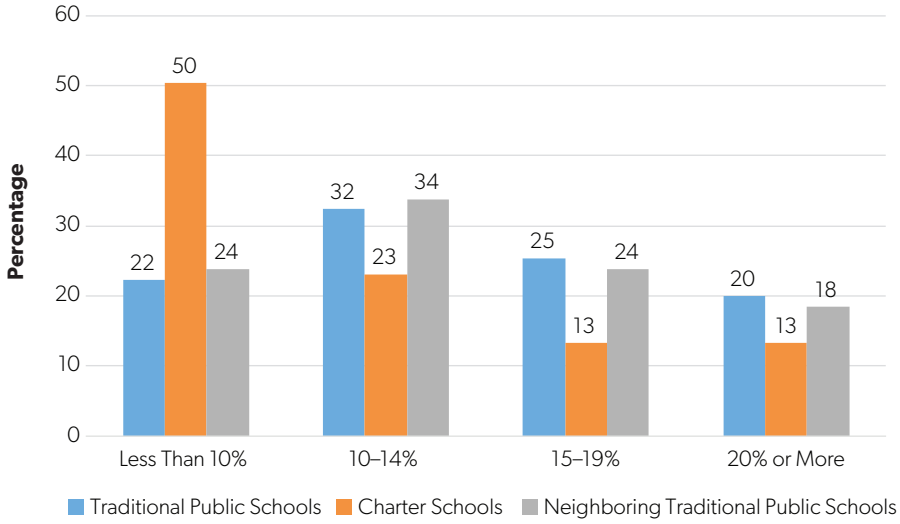
In terms of students with limited English proficiency (LEP), charters and all TPSs show a similar pattern that differs from neighboring TPSs. Neighboring TPSs are more frequently high LEP schools compared to both charters and all TPSs (Figure 7). Unlike for any of the other measures examined in this section, this suggests that charters may be located in areas that have a greater density of LEP students but that they serve relatively low percentages of them compared to their neighboring TPSs.

Discipline rates are another important measure on which to compare charters and TPSs because charter opponents have argued that charters use severe disciplinary practices to "push out" undesirable students. In fact, a report by The Center for Civil Rights Remedies used the very same data as in Figure 8 and found that charters suspend students at higher rates than TPSs do.[23] That pattern appears when charters are compared with all TPSs; however, the pattern of discipline is much more similar between charters and their neighboring public schools, casting doubt on whether charter discipline is disproportionate.

The results in this section clearly show how important it is to compare charters to the TPSs located near them. However, even these comparisons can be misleading because they are based on average characteristics. The assumption that differences between charter schools and neighboring TPSs are uniform is just that—an assumption.

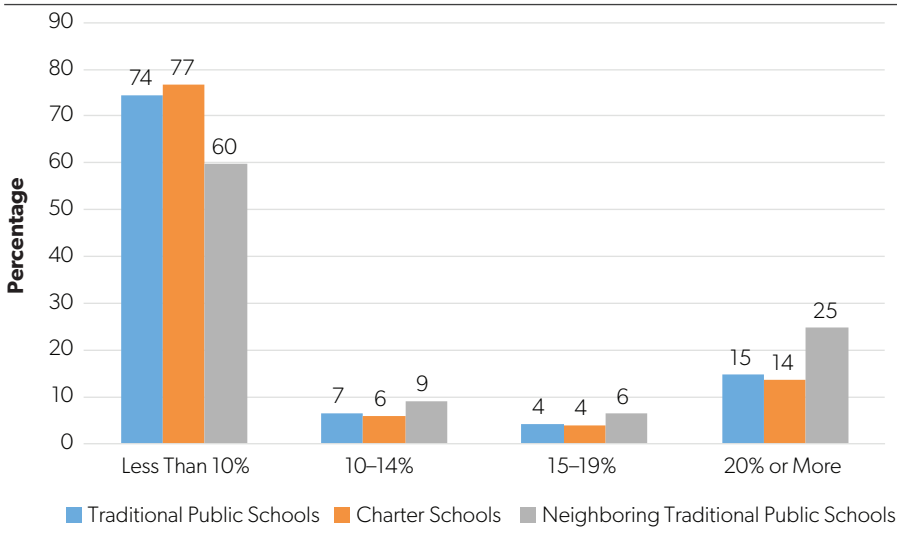
For example, the similarities in student poverty between charters and neighboring TPSs suggested in

Figure 6. Percentage of Traditional, Charter, and Neighboring Traditional Schools by Special Education Student Percentage: 2011–12



Source: National Center for Education Statistics, Common Core of Data, 2011–12; and Civil Rights Data Collection, 2011–12.

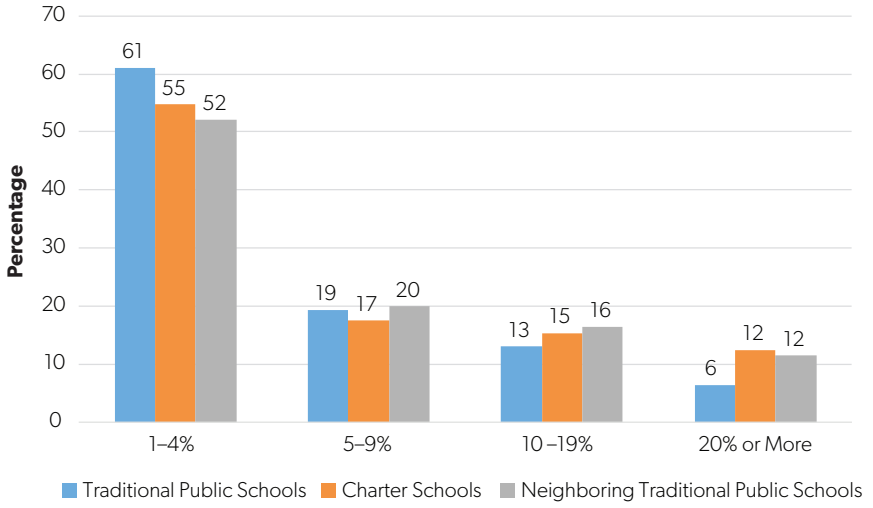
Figure 7. Percentage of Traditional, Charter, and Neighboring Traditional Schools by Limited English Proficient Student Percentage: 2011–12



Source: National Center for Education Statistics, Common Core of Data, 2011–12; and Civil Rights Data Collection, 2011–12.

Figure 4 could be similar even if poverty levels frequently differ. If some charter schools have much higher poverty rates than their neighboring TPSs and a similar number have much lower rates, the averages for the two groups would be similar despite the frequent differences. The next section explores whether these average characteristics are the product of uniform similarities or balanced differences.

Figure 8. Out-of-School Suspension Rate in Traditional, Charter, and Neighboring Traditional Schools: 2011–12



Note: Schools reporting zero suspension are excluded from this table due to data-quality concerns. See Appendix B for data on all schools.
Source: National Center for Education Statistics, Common Core of Data, 2011–12; and Civil Rights Data Collection, 2011–12.

Distribution of Differences

By examining the distribution of differences[24] between charter schools and their nearest traditional public schools, the comparisons in this section go beyond average differences to show how often and by how much charter student populations are distinct from those of TPSs. Unless otherwise noted, differences between charters and neighboring TPSs are presented in the following categories: substantially lower, where charter schools serve less than the average of their neighboring TPSs by 20 or more percentage points; somewhat lower, where charter schools serve 5–19 points less; similar, where neighboring TPSs are within ±5 percentage points; somewhat higher, where charter schools serve 5–19 points more; and substantially higher, where charter schools serve 20+ percentage points more.[25]

These categories show how often charter schools differ from their five neighboring TPSs, but to make sense of them, there must be a benchmark or reference for how TPSs generally

What Is the "Distribution of Differences"?

Comparing charter and traditional public schools is complicated enough, so why is it important to look at the "distribution of differences," and what does that even mean? Consider a hypothetical high school whose varsity and junior varsity football players happen to have the same average speed. The varsity team is far better than the junior varsity, so you might expect the varsity players to be faster on average, but they are not. Why not?

It turns out that the linemen on the varsity team are far bigger than the junior varsity linemen, which makes them much better linemen but slower runners. Other varsity players, such as the running backs, cornerbacks, and wide receivers, are much faster than their junior varsity peers, which makes them better in their positions. While the teams' average speed is the same, there are important differences in speed between players of the same position on the two teams.

By looking at the distribution of the differences in speed—how often and by how much players of the same position differ from one another—it becomes clear that the players' speed differs on the two teams in important ways, but that the pattern of differences is hidden by the team averages. By examining the distribution of differences between each charter school and its neighboring TPSs, one might also find important differences that averages can mask.

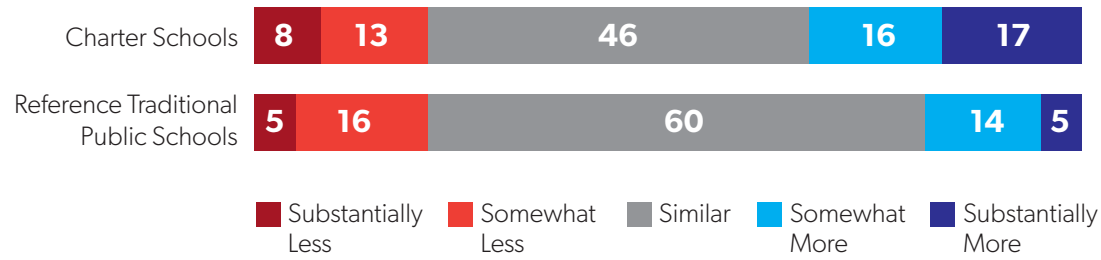
compare to their neighbors. I created a reference set of TPSs for the comparisons below using 18,190 randomly selected TPSs, which were matched to their nearest five TPS neighbors using the identical method used for charter schools.[26] These "reference TPSs" are useful because they show where and by how much the differences between charters and their neighboring schools are distinct from the differences between regular TPSs and their neighbors. For each measure, the distribution of differences are first displayed for charter schools and then for reference TPSs.

Black Students. In terms of black student composition, charter schools were less similar to their neighboring TPSs than the reference TPSs were. Figure 9 indicates that less than half of charters had percentages of black students that were similar (±5 percentage points) to the average of their neighboring TPSs, compared to 60 percent of reference TPSs. One in three charter schools (33 percent) served higher proportions of black students than their neighboring TPSs, while about one in five charter schools served lower proportions.

Charters were more likely to have substantial differences (a difference of 20+ percentage points), with 17 percent serving substantially more black students and 8 percent serving substantially fewer. In comparison, only 5 percent of reference TPSs served substantially more or fewer black students. The most pronounced difference shows that many charter schools served higher proportions of black students than did their neighboring public schools.

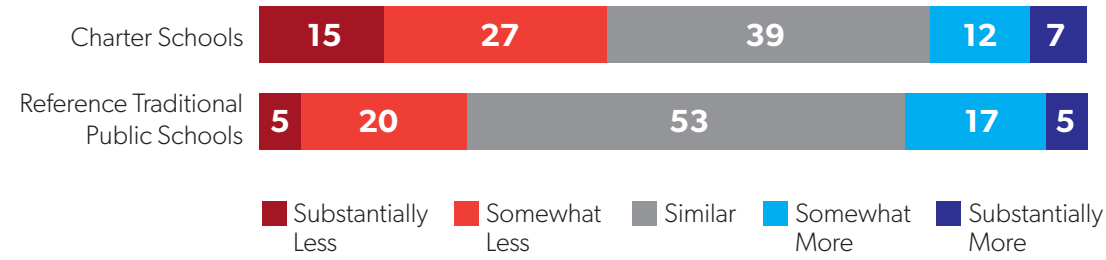
Hispanic Students. Thirty-nine percent of charters served similar proportions of Hispanic students as their TPS neighbors, substantially fewer than the reference TPSs (Figure 10). Additionally, 42 percent of charter schools served at least 5 percentage points fewer Hispanic students than the average in neighboring TPSs,

Figure 9. Distribution of Differences in Black Student Percentage



Source: National Center for Education Statistics, Common Core of Data, 2011–12.

Figure 10. Distribution of Differences in Hispanic Student Percentage



Source: National Center for Education Statistics, Common Core of Data, 2011–12.

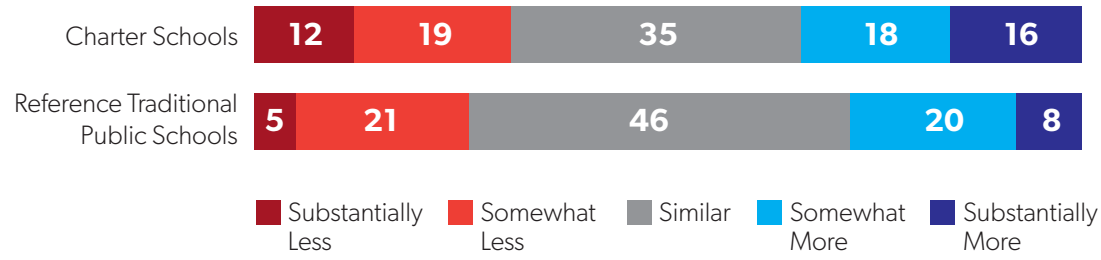
and 15 percent served substantially fewer. The portion of charter schools that served higher percentages of Hispanic students was similar to the reference TPSs. However, the percentage of charter schools serving substantially more Hispanic students than their neighbors was higher than for the reference TPSs (7 vs. 5 percent). These results suggest that many charter schools serve substantially fewer Hispanic students than their neighboring TPSs do.

White Students. In terms of white student composition, charters again differed substantially from their neighboring TPSs, with about as many serving more as serving less. Just over a third of charters served similar proportions compared to 46 percent of reference TPSs (Figure 11). The remainder is fairly balanced between the higher and lower categories, but the percentages of charter schools that served substantially different percentages of white students was more than twice that of reference TPSs. Compared to the reference TPSs, charter schools serve both higher and lower proportions of white students than their neighbors.

Special Education Students. Differences in special education enrollment were pointedly imbalanced (Figure 12). About half of charter schools served similar proportions of special education students as neighboring TPSs, compared to more than 70 percent of reference TPSs, and that difference is almost completely due to the larger portion of charters with somewhat lower special education enrollment rates. This pattern supports critics' frequent assertion that charter schools do not serve special education students in similar proportions to TPSs.

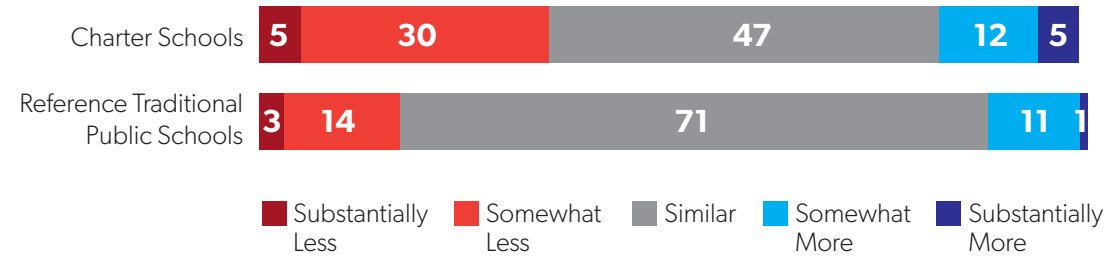
Limited English Proficient Students. Differences in LEP student enrollments show a pattern similar to special education enrollments (Figure 13). About 46 percent of charter schools serve similar proportions of LEP

Figure 11. Distribution of Differences in White Student Percentage



Source: National Center for Education Statistics, Common Core of Data, 2011–12.

Figure 12. Distribution of Differences in Special Education Student Percentage



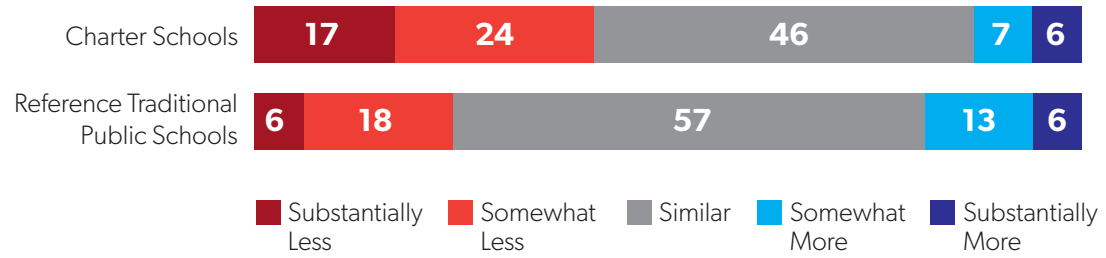
Note: Due to smaller differences based on smaller populations, "substantial" differences for special education and LEP students are 15 percentage points or larger, rather than 20.
Source: National Center for Education Statistics, Common Core of Data, 2011–12; and Civil Rights Data Collection, 2011–12.

students as neighboring TPSs, compared to 57 percent for reference TPSs, and again the difference is totally attributable to the many charters that serve fewer LEP students (41 percent of charter schools compared to 24 percent of reference TPSs). These differences provide ample support for the claim that charter schools serve disproportionately fewer students who are more expensive to educate (including LEP and special education students) than neighboring TPSs.

Student Poverty. Of the charter schools with data on free and reduced-price lunch, more than four in five served higher or lower proportions of eligible students than their neighboring TPSs, twice the proportion for reference TPSs (Figure 14). About 46 percent of charter schools (24 and 22 percent, respectively) enrolled substantially more or fewer poor students than their neighboring TPSs. This was again twice the proportion for reference TPSs. Student poverty differs dramatically between charter schools and their neighboring TPSs, but those differences are split remarkably evenly between those serving more or fewer poor students.

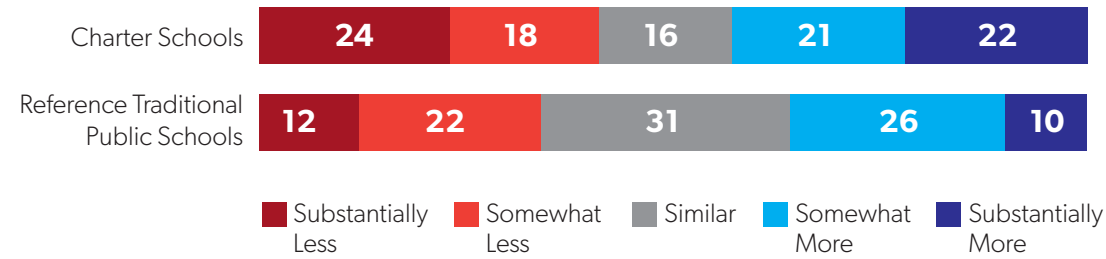
While this paper focuses on charter schools, these comparisons provide a novel and interesting view on how variable traditional public schools' student populations can be. The distributions of difference in student poverty in Figure 14 may be the best example of this. They show that more than two in three public schools differ from the average poverty of their neighbors by more than 5 percent, and nearly one in four differs by more than 20 percent. Those stark differences reveal how powerful the sorting of families across schools by income can be. That these comparisons are between schools in the same districts and of the same level—two factors that would

Figure 13. Distribution of Differences in LEP Student Percentage



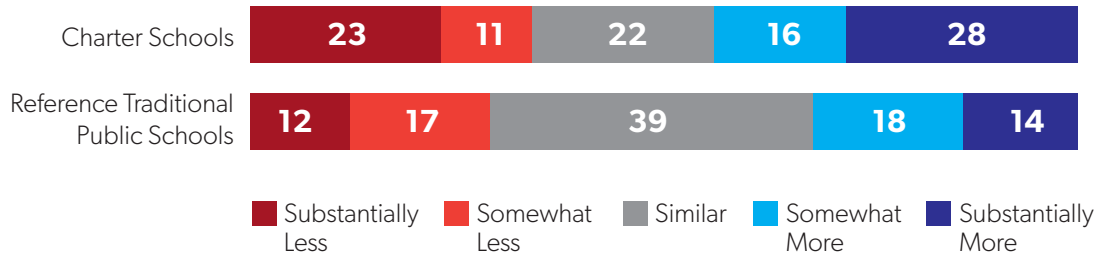
Note: Due to smaller differences based on smaller populations, "substantial" differences for special education and LEP students are 15 percentage points or larger, rather than 20.
Source: National Center for Education Statistics, Common Core of Data, 2011–12; and Civil Rights Data Collection, 2011–12.

Figure 14. Distribution of Differences in Student Poverty



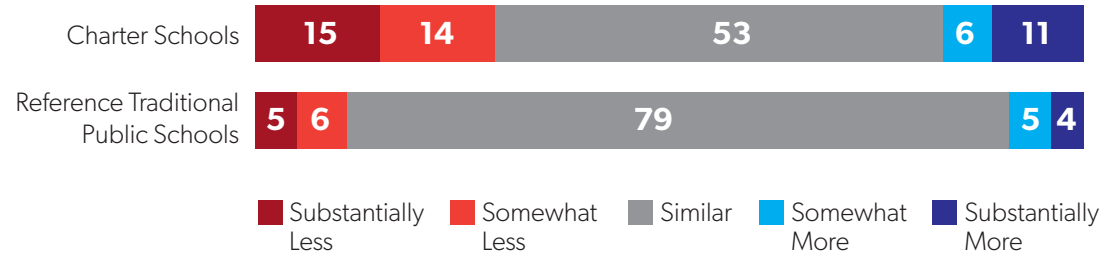
Note: Percentages may not sum to 100 percent due to rounding.
Source: National Center for Education Statistics, Common Core of Data, 2011–12.

Figure 15. Distribution of Differences in Student Proficiency



Note: This proficiency measure is standardized with a mean of 0 and standard deviation (SD) of 1. Differences described as "substantial" for proficiency refer to differences of 0.6 SDs and above; differences described as "somewhat" are between 0.25 and 0.6 SDs; differences described as "similar" are ± 0.25 SDs.
Source: National Center for Education Statistics, Common Core of Data, 2011–12; and ED*Facts* DG583 and 584, SY 2011–12.

Figure 16. Distribution of Differences in Suspension Rates



Note: "Substantial" differences are 10 percent and above; differences described as "somewhat" are between 10 percent and 5 percent; differences described as "similar" are ± 5 percent. Percentages may not sum to 100 percent due to rounding.
Source: National Center for Education Statistics, Common Core of Data, 2011–12; and Civil Rights Data Collection, 2011–12.

be expected to increase such differentials—only underscores their magnitude. Charter schools' student poverty certainly differs from their neighbors more dramatically than the references TPSs do. However, the variability in student poverty among traditional public schools that is revealed by this uncommon methodological approach is surprisingly large and worth noting in its own right.

Proficiency. Differences in state proficiency percentages show a pattern similar to that of student poverty (Figure 15). Charter schools were almost half as likely to have a similar level of proficiency to their neighboring TPSs as reference TPSs are (22 vs. 39 percent). Twenty-eight percent of charter schools served students with substantially higher proficiency levels, and 23 percent served students with substantially lower levels, both twice the percentage for reference TPSs.

These differences are difficult to interpret because they are dependent on both the caliber of students a charter school might appeal to and the school's educational effectiveness. These comingled influences make it difficult to draw clear conclusions, but they do suggest that charter schools do not uniformly select high-achieving students or "counsel out" low performers.

Suspensions. Fifty-three percent of charter schools had suspension rates within ±5 percent of their neighboring TPSs, compared to 79 percent of reference TPSs (Figure 16). Many more charter schools had lower suspension rates (29 percent) compared to their neighboring TPSs than had higher suspension rates (17 percent). While more charters use fewer suspensions, charter schools are more likely to discipline students substantially more and substantially less than are reference TPSs.

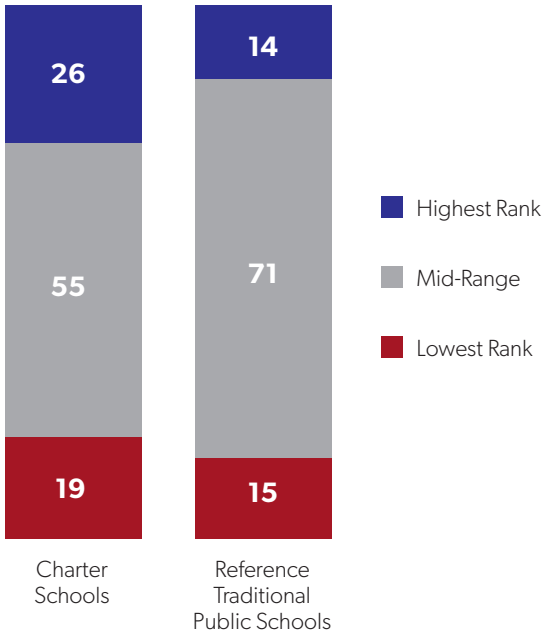
The 29 percent of charter schools that have lower suspension rates than their neighbors are a noteworthy counterpoint to the frequent criticism that charters often counsel out students using discipline. While the 17 percent of charters with higher suspension rates provide weak circumstantial evidence that some charter schools may do this, higher rates of student discipline are clearly not an attribute of charter schools generally. In fact, these data suggest that more charter schools suspend students less often than the TPSs around them, as compared to reference TPSs.

Rankings of Charters Among Their Neighbors

The distribution of differences in the previous section demonstrated how often charters' student compositions are distinct from the average of their neighboring TPSs, often on both ends of a spectrum. This section pushes that question a bit further by looking at how charters rank among their neighbors on each characteristic. The figures below show how often charter schools were either the least (lowest rank) or the greatest (highest rank) in their set of six schools (one charter plus five neighboring TPSs). Again, the reference TPSs were ranked similarly to establish a point of comparison. For every measure, charter schools were at the extremes more often than reference TPSs, holding either the highest or lowest rank in each set, or both.

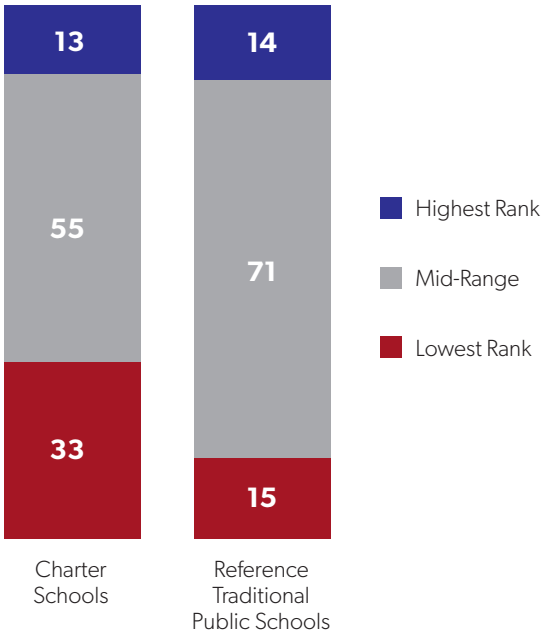
Black Student Enrollment. Only 55 percent of charter schools had black student enrollments in the mid-range of their neighboring TPSs (Figure 17), compared to 71 percent of reference TPSs. Charters were much more often the highest ranked by black enrollment (26 percent), and they were also more often the lowest ranked, compared to reference TPSs. These rankings show how frequently charters are not only different from the average of their neighbors but also the most different among them by black student enrollment.

Figure 17. Frequency of Highest- and Lowest-Ranked Schools by Black Student Percentage



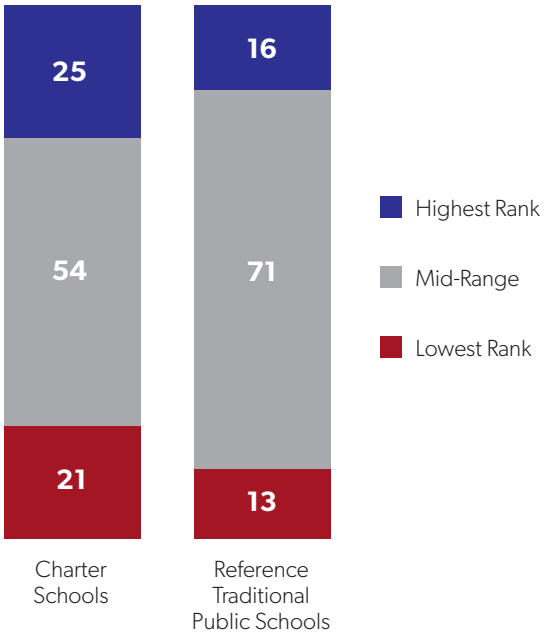
Source: National Center for Education Statistics, Common Core of Data, 2011–12.

Figure 18. Frequency of Highest- and Lowest-Ranked Schools by Hispanic Student Percentage



Note: Percentages may not sum to 100 percent due to rounding.
Source: National Center for Education Statistics, Common Core of Data, 2011–12.

Figure 19. Frequency of Highest- and Lowest-Ranked Schools by White Student Percentage

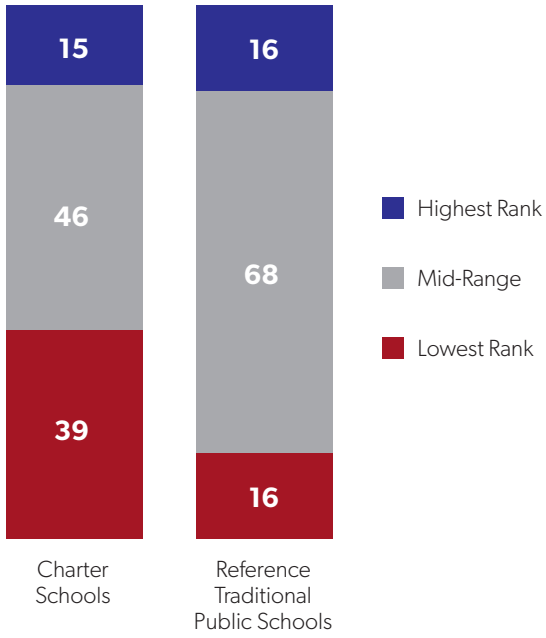


Source: National Center for Education Statistics, Common Core of Data, 2011–12.

Hispanic Student Enrollment. For Hispanic student enrollment, 55 percent of charters fell in the mid-range, which was again less than the 71 percent of reference TPSs (Figure 18). However, these differences were driven by the one in three charters that had the lowest Hispanic student enrollment, which was more than twice the percentage for reference TPSs.

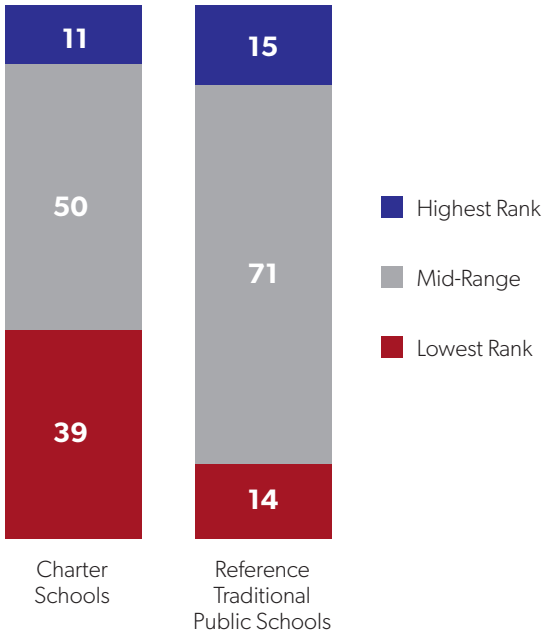
White Student Enrollment. As with black and Hispanic student enrollment, fewer charters fell in the mid-range for white student composition as compared to reference TPSs (54 vs. 71 percent) (Figure 19). Charters' ranks for white student enrollment were quite balanced; they held both the highest and lowest rank more often than reference TPSs, holding the highest rank slightly more frequently.

Figure 20. Frequency of Highest- and Lowest-Ranked Schools by Special Education Percentage



Source: National Center for Education Statistics, Common Core of Data, 2011–12; and Civil Rights Data Collection, 2011–12.

Figure 21. Frequency of Highest- and Lowest-Ranked Schools by LEP Percentage

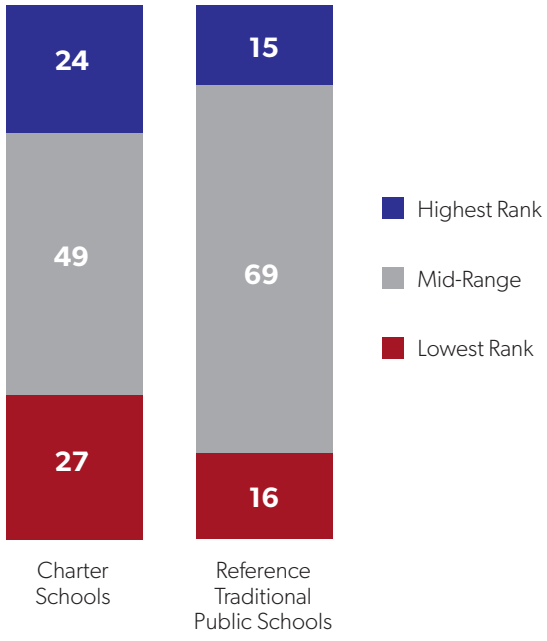


Source: National Center for Education Statistics, Common Core of Data, 2011–12; and Civil Rights Data Collection, 2011–12.

Special Education Students. Less than half of charter schools fell in the mid-range for special education enrollment, compared to more than two-thirds of reference TPSs (Figure 20). Almost two in five charters enrolled the lowest percentage of special education students, more than twice that of reference TPSs. The percentages with the highest proportion of special education students were similar for charters and reference TPSs.

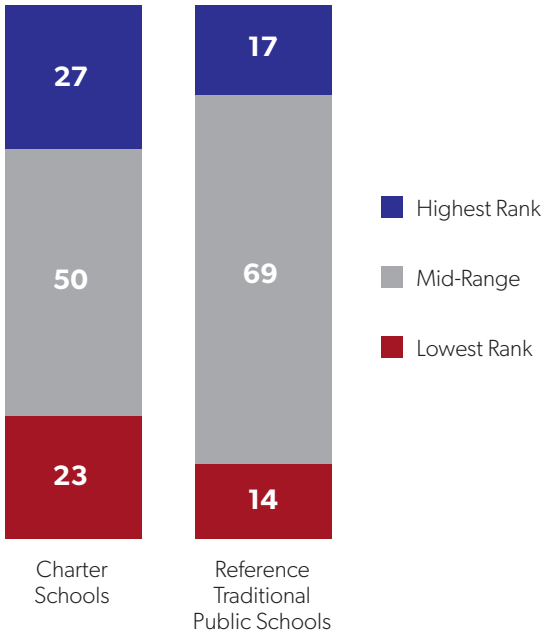
Limited English Proficient Students. The pattern of ranks for LEP students is strikingly similar to that of special education students. In fact, the only pronounced difference is that fewer charters held the highest rank for LEP students compared to reference TPSs (Figure 21).

Figure 22. Frequency of Highest- and Lowest-Ranked Schools by Student Poverty



Source: National Center for Education Statistics, Common Core of Data, 2011–12.

Figure 23. Frequency of Highest- and Lowest-Ranked Schools by Student Proficiency

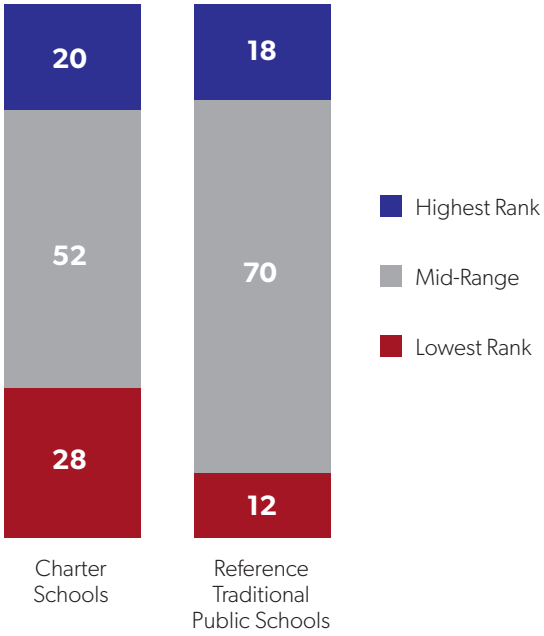


Source: National Center for Education Statistics, Common Core of Data, 2011–12; and ED*Facts* DG583 and 584, SY 2011–12.

Student Poverty. Less than half of charters ranked in the mid-range for student poverty, compared to 69 percent of reference TPSs (Figure 22). As a group, charters served both the highest and lowest percentage of poor students of their neighboring TPSs much more often than reference TPSs did.

Proficiency. In terms of student proficiency, one in two charter schools fell into the mid-range compared to 69 percent of reference TPSs (Figure 23). As with student eligibility for free and reduced-price lunch, charter schools disproportionately had the lowest and the highest proficiency levels among their neighbors. Again this suggests a bimodal distribution of ranks, but with one slanted more toward higher proficiency rates.

Figure 24. Frequency of Highest- and Lowest-Ranked Schools by Out-of-School Suspension Rate



Source: National Center for Education Statistics, Common Core of Data, 2011–12; and Civil Rights Data Collection, 2011–12.

Suspensions. Again, about half of charters were in the mid-range for suspension rates, compared to 70 percent of reference TPSs. The percentage of charters that had the highest rank was quite close to that of reference TPSs (Figure 24). In contrast, charters were the lowest ranked in terms of suspensions twice as often as reference TPSs, casting significant doubt on the frequent assertion that charter schools broadly use excessive discipline procedures.

Summary of Results

These analyses underscore two important principles that should reshape the conventional wisdom on both sides of the charter debate. First, they clearly illustrate how much it matters what TPSs charter schools are compared to. Many of the apparent differences between all TPSs and charter schools disappear when charters are compared to neighboring TPSs. Those disappearing differences demonstrate how simplistic comparisons can be misleading, resulting in more smoke than light.

Second, these analyses show that it not only matters what TPSs charters are compared to but also how they are compared. Refining the set of TPSs that charters are compared to certainly gets closer to the truth, but it can often be misleading to compare their average characteristics because charters are not uniformly different, as the second and third sections clearly demonstrate. On every measure except suspension rates, more than half of charters fell outside the "similar" category, and on most measures, large numbers of charter schools differed from their neighbors in both directions. Comparing average characteristics obscures the diversity of charter schools.

Part II: Discussion

These analyses do not yield a simple answer to the opening question "How are charter schools different from traditional public schools?" However, they do offer three insights that can lead to a more informed and fruitful conversation about charters. First, charter schools are not uniform, and attempts to describe them as such are simply counterproductive. Second, these results clearly affirm some myths about charter schools and debunk others, thereby calling out misleading generalizations. Finally, they suggest that a more productive conversation about charters might start by asking a better question.

Charter Schools' Defining Characteristic Is Difference

The national conversation begs for a singular image of charter schools. Given that national policies have encouraged charters' development and that national advocacy organizations, and their opponents, are often the loudest voices in the nationwide public debate, it is no wonder that this conversation privileges simple national images of what charter schools are and how they operate. Unfortunately, the desire for a unified description encourages conflicting portraits of charters from either side of the debate.

But charter schools are not unified. In fact, their defining characteristics may be differences. Charters differ from TPSs along many axes, but seldom in uniform ways. That defining characteristic makes sense considering that charters are designed to be alternatives to TPSs. The fact that there are balanced differences in the kinds of students who charters and TPSs serve is some indication that charters are succeeding as designed.

Problems arise when either side oversimplifies these differences to support a particular narrative. The Center for Education Reform wrote in its 2014 Survey of Charter schools report, "When compared to traditional public schools, charters serve a more disadvantaged student population, including more low-income and minority students."[27] In contrast, prominent charter critic Diane Ravitch asks, "Is the success of charters—those few that are successful—is it because they have longer school days or because they are selecting their students?"[28]

How can smart, well-intentioned observers hold such polar opposite perspectives? The football team analogy is a good illustration. The two sides of the national conversation on charter schools are often like two fans discussing what sets the varsity team apart from the junior varsity. The first fan, who narrowly concentrates on the linemen, claims, "Our team will be the champions this season because they are the biggest and strongest." A second fan who concentrates on the passing game claims the opposite: "Our team will stack up wins this season because they have the fastest players." Both fans have a point, but both are missing the bigger picture.

The two sides of the charter debate make similar errors by expressing views of charter schools that are based in some fact, but not representative of charter schools as a whole. Ultimately, pushing a singular dominant view of charters winds up serving the interests on one side of the debate at the expense of a productive and accurate conversation. This report's results can help clarify why polarized views persist and, in some instances, where they are errant.

Affirming and Debunking Charter Myths

The evidence in these analyses supports some charter myths and debunks others. For example, comparisons of national special education rates of all charters and all TPSs have been used to support and refute the idea that many charters serve fewer students with disabilities.[29] The analyses in this report have shown such comparisons can be misleading, but they are not always. This evidence plainly shows charters serve far fewer students

with disabilities as compared to TPSs. While some charter schools serve higher percentages of students with disabilities than their neighboring TPSs, an alarming percentage serve significantly lower proportions. The same pattern is evident for LEP students. These differences show significant patterns that charter school advocates would do better to face head-on than to deflect.

On the other hand, charter discipline practices are a clear example of a myth that these analyses persuasively discredit. Recently, a report by UCLA's Center for Civil Rights Remedies used oversimplified comparisons that supported the notion that charters have higher rates of out-of-school suspension.[30] Press coverage used pejorative phrases such as "the charter sneak attack" and the "school-to-prison pipeline" to describe the findings and further propagate this myth.[31] Appropriate and balanced methodological critiques of the report will only do so much to push back on such generalizations.[32]

These analyses, using the very same data but more careful comparisons, clearly show that the reverse is true for most charter schools. Compared to their neighboring TPSs, more charters have lower suspension rates than reference TPSs. Unbridled discipline policies are problematic in any school, but the idea that charter schools suspend students more than traditional public schools do is a myth.

A Better Conversation Starts with a Better Question

A satisfying answer to the original question of how charters and TPSs differ is elusive because the question problematically assumes a straightforward answer. But the answer, "Charter schools differ in numerous ways that are mostly balanced at either ends of many spectrums," is neither straightforward nor satisfying. A more satisfying conversation might start with a better question: "*Why* are charter schools different from traditional public schools?"

Charter schools are developed as independent alternatives to TPSs, and they should be evaluated in light of that organizing principle. TPSs are coordinated by the state to educate all students. Charters are also governed by the state, but in a different legal structure with a different purpose. Charter schools are ancillary to the centralized and coordinated system of TPSs. Their *raison d'être* is to create innovative and alternative options; as a result, they will predictably appeal to some students' preferences and not others'.

The differences documented in this report attest to how successful charters have been at differentiating themselves, but these differences do not explain themselves. In fact, either side of the charter debate can use them differently based on its interpretation of the underlying cause and effect. Proponents are bound to argue that charters' student populations differ because of the schools' distinct programs; opponents argue the converse, that charter programs are different primarily because they select more advantaged students. While these are not mutually exclusive explanations, it is useful to consider how the pattern of differences shown here squares with those two arguments.

The argument focused on charters' programmatic distinctiveness meshes with most of the differences shown here. Systematic cream-skimming is inconsistent with the very balanced charter differentials for white and black students, student poverty, and student proficiency. Additionally, one of charter critics' favorite alleged mechanisms for cream-skimming—high suspension rates—is not only not evident for most charters, but the reverse pattern appears to be dominant. If charters were generally cream-skimming, we would expect to see more uniform differences, with charters having fewer poor black and low-performing students and more white, non-poor, and high-performing students.

However, two patterns shown here—the imbalanced differences for LEP and special education students—are important to highlight as ones that support charter opponents' theory that charters cream-skim. The main reason these categories are so important is because LEP and special education students are more expensive to educate and thus undesirable for schools on the basis of expenditures. In the larger context of charter differences, those two measures are weak evidence that charters are selective by design.

This evidence of selectivity is weak in part because it is circumstantial. Little or no empirical research suggests these enrollment gaps are attributable to selectivity, while some research suggests that in multiple cities differences in special education enrollments are

due to other mechanisms.[33] That evidence is also weak because it is inconsistent with the patterns for other student attributes. In light of this report's findings, the cream-skimming argument would have to assert that charters have strategic selection for LEP and special education students, but not for other kinds of student disadvantage. That inconsistency makes the proposition that charters generally differ through strategic selectivity dubious at best.

Nonetheless, these differences for LEP and special education students should be explored because they are clear signals for where the charter sector has room to mature. If innovation and specialization are key benefits of charter schools, the sector should be able to offer those benefits to all students as it matures. In fact, charter proponents' logic would suggest that charters should produce better options for these students' specific needs.

If that happens, we should not necessarily expect to see equal enrollment rates between charters and their neighboring TPSs, but more charters would have higher percentages of these students, resulting in more balanced differences overall. Of course, it would be more challenging to address these differences in the ancillary charter schools system than in the centralized and coordinated TPS system. If the charter sector is to serve more of these students, changes will have to be made state by state, authorizer by authorizer, and school by school.

The methods used in this report, the findings it produces, and the challenges it highlights all point to the importance of studying charter schools responsibly and with nuance. Overarching characterizations of charter schools may benefit combatants in the charter debate, but they do little to improve charter school policy, clarify misconceptions, or ensure that diverse educational options are available to all kinds of students. The complexity of how and why charter schools differ from traditional public schools should be evaluated and addressed in ways that acknowledge the importance of context. Hopefully the methods and findings in this study will help create a more grounded and productive conversation about charter schools, in their local contexts and across the nation.

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About the Author

Nat Malkus (Nat.Malkus@AEI.org) is a research fellow in education policy studies at the American Enterprise Institute (AEI).

Appendix A. Data and Methods

I draw on three sources of publicly available data from 2011–12, the most recent year that can combine all three for the most comprehensive comparisons of charters and TPSs. The primary data source is the 2011–12 Common Core of Data (CCD) from the National Center for Education Statistics, which includes information on each school's charter school status, school type, location (longitude and latitude), locale (urban, suburban, town, or rural), student racial composition, and percentage of students eligible to receive reduced-price meals.[34] For comparable measures of average student academic achievement, ED*Facts* school-level data on the percentage of students scoring proficient or above on state reading and mathematics assessments were merged with CCD.[35] Data from the 2011–12 Civil Rights Data Collection from the US Department of Education's Office of Civil Rights were also merged with CCD to include percentages of students with disabilities and students who were English language learners, as well as data on student discipline.

To create a comparison group of TPSs, I developed a straightforward means of identifying TPSs whose students could have enrolled in a charter school using three criteria: distance, jurisdiction, and grade range. The first matching criterion is distance. Of the many school characteristics that inform families' school choice decisions, location is one of the most important.[36] Assuming that students in the closest TPSs are the most likely to attend a given charter school, I include the closest five as the comparison neighboring TPSs for each charter.[37] To curb unreasonable matches, TPSs located more than 30 miles from a charter school (typically found in rural areas) were considered too far away to be a matched neighbor.

The second criterion was the charter school's relationship to the school district in which the charter school was located. Charter schools that were authorized by a school district were only matched to schools in the same district, based on the assumption that these charters could only draw students within that district. Charter schools authorized by an entity other than the school district were allowed to match with any TPS in the state.

The third criterion was grade range. Neighboring TPSs that would be comparable to charters would need to serve the same grade range. Matching grade ranges avoided matches that would not make appropriate comparisons, such as between a high school and a nearby elementary charter school.[38]

Not all charter schools could be matched to five neighboring TPSs. Of the 5,700 charter schools in the CCD in 2011–12,[39] 890 were removed because they were special purpose schools, were too small to make meaningful comparisons, or were virtual charter schools not suited to geographic matching.[40] In total, 4,800 (84 percent) charter schools were matched to at least one neighboring TPS. Of these, 4,280 (89 percent) could be matched to five neighboring TPSs.

Reference TPS schools were matched to their own neighboring TPS schools using the same methods. To select reference TPSs that would match the urbanicity of charter schools, reference TPSs were drawn from urban, suburban, town, and rural locals in proportion with charters. Of an initial 25,000 reference TPSs randomly selected within each locale, 18,160 reference TPSs were successfully matched to five neighboring TPSs. These reference TPSs were compared to their neighboring TPSs in the same way charter schools were to provide some benchmark for comparisons.

Not all schools had complete data on all characteristics. Three primary sources of incomplete data were

missing free and reduced-price lunch data on CCD, schools on the CCD that could not be matched to records in the CRDC data file, and those that could not be matched to the ED*Facts* data files.

In 2011–12, 12 percent of all charter schools in the CCD reported zero students eligible free and reduced-price lunch (FRPL), compared to less than 2 percent for TPSs. The large difference between these two percentages raises the possibility that a large portion of charter schools recorded a "0" for the number of students eligible for FRPL rather than reporting that the schools did not participate. Some evidence suggests that the percentages of charter schools that do not participate in the school lunch program match the levels reported in this paper. Specifically, over 30 percent of charter schools in California did not participate in the NSLP in 2002, which is consistent with the percentages of charter schools that report both missing and zero qualified students in the CCD in the same year. To ensure valid comparisons of the percentages of students eligible for the NSLP in charters and neighboring schools, charter schools that reported zero eligible students were not included. Restricting comparisons of NSLP eligibility to charter schools with a percentage greater than zero may result in conservative estimates of the percentages of charter schools serving fewer students in poverty than neighboring schools and may overstate the proportion of charter schools that serve larger percentages of students in poverty than neighboring schools. Other studies have used these same exclusion decisions.[41] About 520 (12 percent) of the 4,280 charter schools with five TPS neighbor matches either had missing FRPL data or reported 0 percent, and thus are excluded from comparisons of FRPL participation.

Of the 4,280 charter schools with five matching neighboring TPSs using the CCD, 3,670 both had data on the CRDC and could be matched to five TPSs that also had complete CRDC data (76 percent of screened charter schools and 86 percent of charter schools with five TPS matches). About 3,440 charter schools both had data on ED*Facts* data and could be matched to five TPSs that also had complete ED*Facts* data (72 percent of screened charter schools and 80 percent of charter schools with five TPS matches). These missing data elements provide some limits to the generalizability of these results. However, the resulting dataset is, to my knowledge, the largest dataset that combines information on data on student characteristics, discipline, and performance for both traditional and charter public schools.

Appendix B. Data Tables

Table A1. Percentage Distribution of Traditional Public Schools, Charter Schools, and Traditional Public Schools That Neighbor Charter Schools, by Selected School Characteristics: 2011–12

School Characteristic	Traditional Public Schools	Charter Schools	Neighboring Traditional Public Schools
School Size			
Fewer Than 100 Students	4.2	13.8	2.0
100–199 Students	8.1	21.5	3.8
200–499 Students	41.4	42.4	37.9
500–749 Students	46.3	22.3	56.3
Locale			
City	23.9	55.7	49.4
Suburban	28.3	21.8	28.2
Town	13.5	7.0	8.1
Rural	34.3	15.5	14.3
Percentage of K–12 Students Eligible for Free or Reduced-Price Lunch			
Schools Participating in Free or Reduced-Price Lunch Program	94.7	87.5	93.0
1–34 Percent	29.8	25.9	22.7
35–49 Percent	18.4	12.2	14.2
50–74 Percent	28.7	22.8	25.8
75 Percent or More	23.1	39.1	37.3
Schools Not Participating in Free or Reduced-Price Lunch Program	5.3	12.5	7.0
Percentage Minority Enrollment			
Less Than 20 Percent	35.0	10.8	14.9
20–49 Percent	25.9	17.3	22.3
50–74 Percent	13.9	12.5	17.0
75 Percent or More	25.2	59.4	45.8

continued on the next page

Table A1. Percentage Distribution of Traditional Public Schools, Charter Schools, and Traditional Public Schools That Neighbor Charter Schools, by Selected School Characteristics: 2011–12 (continued)

School Characteristic	Traditional Public Schools	Charter Schools	Neighboring Traditional Public Schools
Percentage Special Education Enrollment			
Less Than 10 Percent	22.3	50.3	23.9
10–14 Percent	32.4	23.1	33.8
15–19 Percent	25.4	13.3	23.9
20 Percent or More	19.9	13.2	18.4
Percentage Limited English Proficient Enrollment			
Less Than 10 Percent	74.5	76.7	59.8
10–14 Percent	6.6	5.8	9.1
15–19 Percent	4.2	3.9	6.4
20 Percent or More	14.7	13.6	24.8
Out-of-School Suspension Rate			
Reported Zero Suspensions	16.8	21.7	10.9
Reported One or More Suspensions	83.2	78.3	89.1
1–4 Percent	61.1	54.8	52.1
5–10 Percent	19.4	17.4	19.9
10–19 Percent	13.0	15.3	16.5
20 Percent or More	6.4	12.4	11.5

Source: National Center for Education Statistics, Common Core of Data, 2011–12; ED*Facts* DG583 and 584, SY 2011–12; and Civil Rights Data Collection, 2011–12.

Table A2. Distribution of Charter Schools by Category of Differences Between Each Charter and Its Nearest Five TPSs, by Select Characteristics: 2011–12

	Substantially Lower	Somewhat Lower	Similar	Somewhat Higher	Substantially Higher	Number of Charter Schools
Black Students	7.8%	13.5%	46.3%	15.7%	16.7%	4,280
Hispanic Students	15.4%	27.1%	39.2%	11.5%	6.8%	4,280
White Students	11.6%	19.3%	35.0%	18.5%	15.7%	4,280
Special Education Students	5.1%	30.5%	47.1%	12.3%	5.2%	3,670
LEP Students	16.6%	24.4%	46.4%	6.5%	6.0%	3,670
Free and Reduced-Priced Lunch Eligibility	23.6%	17.8%	16.0%	20.6%	21.9%	3,760
Proficiency	23.4%	10.8%	21.9%	16.4%	27.6%	3,440
Suspensions Per Student	15.3%	14.3%	52.8%	6.5%	11.2%	3,670

Note: Sample sizes rounded to the nearest 10 schools.
Source: National Center for Education Statistics, Common Core of Data, 2011–12; ED*Facts* DG583 and 584, SY 2011–12; and Civil Rights Data Collection, 2011–12.

Table A3. Distribution of Reference TPSs by Category of Differences Between Each Reference TPS and Its Nearest Five TPSs, by Select Characteristics: 2011–12

	Substantially Lower	Somewhat Lower	Similar	Somewhat Higher	Substantially Higher	Number of Reference Schools
Black Students	4.9%	16.2%	59.9%	14.1%	4.9%	18,190
Hispanic Students	5.2%	20.2%	52.6%	17.1%	5.0%	18,190
White Students	5.3%	21.4%	45.9%	19.8%	7.5%	18,190
Special Education Students	3.1%	13.8%	70.6%	11.0%	1.5%	17,700
LEP Students	5.7%	17.6%	57.0%	13.5%	6.2%	17,700
Free and Reduced-Priced Lunch Eligibility	12.1%	21.5%	30.7%	25.8%	9.8%	16,830
Proficiency	12.1%	17.0%	38.8%	17.5%	14.5%	15,090
Suspensions Per Student	5.0%	6.2%	79.0%	5.4%	4.5%	17,700

Note: Sample sizes rounded to the nearest 10 schools.
Source: National Center for Education Statistics, Common Core of Data, 2011–12; ED*Facts* DG583 and 584, SY 2011–12; and Civil Rights Data Collection, 2011–12.

Table A4. Percentage Distribution of Public Charter Schools That Are the Lowest and Highest in Rank Order of Neighboring Five Schools, by Selected Student Characteristics: 2011–12

Student Characteristic	Lowest	Mid-Range	Highest
Black Enrollment	19.0	54.6	26.4
Hispanic Enrollment	32.6	54.8	12.6
White Enrollment	21.4	53.8	24.8
Special Education	39.5	45.9	14.7
LEP Students	39.0	50.3	10.7
Free and Reduced-Priced Lunch Eligibility	27.0	49.0	24.0
Proficiency	22.8	50.3	26.9
Suspensions Per Student	28.0	52.4	19.6

Source: National Center for Education Statistics, Common Core of Data, 2011–12; ED*Facts* DG583 and 584, SY 2011–12; and Civil Rights Data Collection, 2011–12.

Table A5. Percentage Distribution of Reference TPSs That Are the Lowest and Highest in Rank Order of Neighboring Five Schools, by Selected Student Characteristics: 2011–12

Student Characteristic	Lowest	Mid-Range	Highest
Black Enrollment	14.7	70.9	14.4
Hispanic Enrollment	15.1	70.6	14.3
White Enrollment	13.1	71.3	15.6
Special Education	16.3	68.0	15.7
LEP Students	13.6	71.3	15.1
Free and Reduced-Priced Lunch Elibility	16.2	69.1	14.7
Proficiency	13.8	69.1	17.1
Suspensions	12.7	69.6	17.6

Source: National Center for Education Statistics, Common Core of Data, 2011–12; ED*Facts* DG583 and 584, SY 2011–12; and Civil Rights Data Collection, 2011–12.

Notes

1. Frederick Hess, Kelsey Hamilton, and Jenn Hatfield recently analyzed coverage of charter schools in media outlets from 2005 to 2015 and found the coverage had become increasingly opinionated and polarized. See Frederick M. Hess, Kelsey Hamilton, and Jenn Hatfield, "How Media Coverage of Charter Schools Changed in the Past Decade," American Enterprise Institute, August 2016, http://www.aei.org/publication/how-media-coverage-of-charter-schools-changed-in-the-past-decade/.

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8. Daniel J. Losen et al., *Charter Schools, Civil Rights, and School Discipline: A Comprehensive Review*, The Civil Rights Project/Proyecto Derechos Civiles at UCLA, March 2016, https://civilrightsproject.ucla.edu/resources/projects/center-for-civil-rights-remedies/school-to-prison-folder/federal-reports/charter-schools-civil-rights-and-school-discipline-a-comprehensive-review/losen-et-al-charter-school-discipline-review-2016.pdf.

9. Linda Jurkowitz and Michele McNeil, "Discipline Data: Charters vs. Noncharters," *Education Week*, July 20, 2015, http://www.edweek.org/ew/section/infographics/charter-discipline-infographic.html.

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14. National Alliance for Public Charter Schools, "Facts About Charters," http://www.publiccharters.org/get-the-facts/public-charter-schools/faqs/.

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16. Kevin G. Welner, "The Dirty Dozen: How Charter Schools Influence Student Enrollment," *Teachers College Record* (2013).

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19. Katrina E. Bulkley, "Charter Schools Taking a Closer Look," *Kappa Delta Pi Record* 47, no. 3 (Spring 2011): 110–15; and Gary Ritter et al., "A Closer Look at Charter Schools and Segregation," *Education Next* 10, no. 3 (Summer 2010).

20. Although comparatively small, the average size of charter schools is growing steadily over time. See Digest of Education Statistics, "Table 116. Number and Percentage Distribution of Public Elementary and Secondary Students and Schools, by Traditional or Charter School Status and Selected Characteristics: Selected Years, 1999–2000 through 2010–11," http://nces.ed.gov/programs/digest/d12/tables/dt12_116.asp.

21. Schools that reported zero students eligible for free and reduced-price meals are not included in this table due to data-reporting concerns. See Appendix A for details.

22. High-poverty schools are those with 75 percent or more of students eligible for free and reduced-price lunch.

23. Losen et al., *Charter Schools, Civil Rights, and School Discipline*.

24. The term "differences" refers to differences between a given characteristic in each charter school (or simulation TPS) and the average of the same characteristic in the five neighboring TPSs matched to that charter school.

25. For the percentages of limited English proficient and special education students, who have lower average percentages than poverty or race categories, the substantially lower and higher schools differed by 15 percentage points instead of 20. Categories of difference for student proficiency were defined as substantially lower, where charter schools score 0.6 standard deviations below their neighboring TPSs; somewhat lower, where charter schools score 0.25 to 0.59 standard deviations below; similar, where charter schools are within ±0.25 standard deviations; somewhat higher, where charter schools score 0.25 to 0.59 standard deviations higher; and substantially higher, where charter schools score 0.6 standard deviations or more higher. For out-of-school suspension rates, substantial differences were 10 percentage points or more, somewhat less or more than 5 but less than 10 percentage points, and similar rates were those within ±5 points.

26. The reference TPSs were randomly selected from all TPSs within four strata that were matched to charter school locales. Since charter schools are more frequently urban and less frequently rural than TPSs (see Figure 3) and the likelihood of matching five schools within the same district was greater for schools in more urban locales, I randomly selected TPSs within each stratum in the following proportions: 50 percent of reference TPSs were drawn from urban locales, 25 percent from suburban locales, 15 percent from towns, and the remaining 10 percent from rural locales. No charter schools were included in these matches. The only difference in the matching procedures is that all reference TPSs were matched to schools within their districts, since those schools shared the same jurisdiction, while some charter schools that can draw students across district boundaries were matched to schools from different districts. This matching difference is not due to a differential application of the matching method, but to the inherent difference in how some charter schools can enroll students compared to most TPSs.

27. George A. Scott, *Charter Schools: Additional Federal Attention Needed to Help Protect Access for Students with Disabilities*, US Government Accountability Office, June 2012; and Ted Rebarber and Alison Consoletti Zgainer, eds., *Survey of America's Charter Schools*, Center for Education Reform, 2014, https://www.edreform.com/wp-content/uploads/2014/02/2014CharterSchoolSurveyFINAL.pdf.

28. Scott, *Charter Schools: Additional Federal Attention Needed*; and Rebarber and Consoletti Zgainer, eds., *Survey of America's Charter Schools*.

29. Scott, *Charter Schools: Additional Federal Attention Needed*; and Rebarber and Consoletti Zgainer, eds., *Survey of America's Charter Schools*.

30. Losen et al., *Charter Schools, Civil Rights, and School Discipline*.

31. Motoko Rich, "Charter Schools Suspend Black and Disabled Students More, Study Says," *New York Times*, March 16, 2016, http://www.nytimes.com/2016/03/17/us/charter-schools-suspend-black-and-disabled-students-more-study-says.html; Rebecca Klein, "Charter Schools Are Suspending Kids More Than Other Schools, and That's a Problem," Huffington Post, March 16, 2016, http://www.huffingtonpost.com/entry/charter-school-suspensions_us_56e9939ee4b0b25c91841ed5; and Jeff Bryant, "Here Comes the Charter School Sneak Attack: This Is How a Bipartisan Education Reform Bill Turns into a Disaster for Our Kids," Salon, April 16, 2016, http://www.salon.com/2016/04/16/here_comes_the_charter_school_sneak_attack_this_is_how_a_bipartisan_education_reform_bill_turns_into_a_disaster_for_our_kids/.

32. Robin Lake, "We Need Productive Research on Discipline, Not Polemics," RealClearEducation, March 18, 2016, http://www.realcleareducation.com/articles/2016/03/18/we_need_productive_research_on_discipline_not_polemics_1275.html.

33. Marcus A. Winters, "Understanding the Gap in Special Education Enrollments Between Charter and Traditional Public Schools: Evidence from Denver, Colorado," *Educational Researcher* 44, no. 4 (May 2015); and Marcus A. Winters, *Why the Gap? Special Education and New York City Charter Schools*, Manhattan Institute, September 30, 2013, http://www.manhattan-institute.org/html/why-gap-special-education-and-new-york-city-charter-schools-5862.html.

34. This paper includes data from universe surveys in which all relevant units are included in the data collection. Thus, all statements about differences in this report are directly supported by the data. As a result, there is no sampling error, and observed differences are reported as true.

35. Since proficiency-rate cutoffs differ by state, I standardize proficiency percentages within each state and then re-standardize them across states for a comparable measure with a mean of zero and a standard deviation of one.

36. The CCD data cannot capture distances between families' residential locations and schools, but the schools' longitude and latitude coordinates in the CCD data file make calculating distances between schools straightforward.

37. Researchers have used a variety of geographic boundaries to compare charter and nearby traditional public schools; these boundaries have included states (Frankenberg and Lee), school districts, Census tracts, Census block groups (Gulosino and d'Entremont), and school attendance boundary areas (Saporito and Sohoni). See Erica Frankenberg and Chungmei Lee, "Charter Schools and Race: A Lost Opportunity for Integrated Education," *Education Policy Analysis Archives* 11, no. 2 (2003); Charisse Gulosino and Chad d'Entremont, "Circles of Influence: An Analysis of Charter School Location and Racial Patterns at Varying Geographic Scales," *Education Policy Analysis Archives* 19, no. 8 (2011): 8; and Salvatore Saporito and Deenesh Sohoni, "Coloring Outside the Lines: Racial Segregation in Public Schools and Their Attendance Boundaries," *Sociology of Education* 79, no. 2 (April 2006): 81–105. Generally, comparisons based on smaller geographic units better reflect differences between the students served by charter schools and traditional public schools than comparisons based on larger geographic units. See Frankenberg, Siegel-Hawley, and Wang, *Choice Without Equity*; and Gulosino and d'Entremont, "Circles of Influence." Consequently, the targeted analyses in this report rely on relatively small geographic clusters of schools. This method restricts comparisons to the traditional public schools whose students could realistically choose to apply to a charter school. As such, charter schools whose charter is authorized by a school district are only allowed to neighbor traditional public schools within the same district. Charter schools whose charter is authorized by an authority other than a school district can neighbor the nearest five traditional public schools within the same state. This grouping mechanism results in a "neighboring traditional public school" comparison group of about 12,200 neighboring schools out of more than 93,800 traditional public schools.

38. TPSs were first eligible for comparison to a charter school if the school was at the same grade level (elementary, middle, high school, or combined). If a charter school did not have five matches of the same grade level within the same jurisdiction, combined schools—those with grades spanning elementary, middle, and high school—were allowed as matches to complete a set of five comparable TPSs.

39. All school counts have been rounded to the nearest 10 per data disclosure rules.

40. Charter schools were removed from the matching process in three steps. First, I removed 560 charter schools that were not considered "regular" public schools on CCD. The removed schools were either special education, vocational, or alternative schools that would not amount to fair comparisons with "regular" neighboring traditional public schools. Of the remaining 5,140 charter schools, I

removed 170 whose enrollments were 25 students or less. Since comparisons between charter schools and traditional public schools are based on percentages of different enrollments, comparisons with very small schools might have outsized influences, and thus very small schools were removed.

Of the remaining 4,970 charter schools, 160 were removed because they were identified as virtual schools. Virtual schools are schools that operate via the Internet and are not amenable to the geographic comparison method used in this brief. The geographic proximity of students to the location of a virtual school is unrelated to students' likelihood of attending them; thus, virtual charter schools were removed from the data used in sections 2 and 3 of this report, which compare charter and neighboring public schools. Although there is no virtual school identifier, three checks were used to screen virtual schools out of the analyses using 2011–12 CCD data. First, charter schools with more than 2,500 students or teacher-pupil ratios of more than 50 were removed since virtual schools often enroll far more students than brick-and-mortar schools do, and given the relatively smaller size of most charter schools, those with enrollments of more than 2,500 or teacher-pupil ratios of more than 50 students would be outliers and few in number. Second, charter school names that contained key words typically associated with virtual schooling were removed; these key words were "virtual," "electronic," "cyber," "online," "on-line," and "digital." Third, charter schools that included the names of several companies that run multiple virtual charter schools were removed from the analyses; these company names were "Escholar," "Evit," "Connections Academy," and "Visions in Education."

41. See Kevin Booker et al., "The Effect of Charter Schools on Traditional Public School Students in Texas: Are Children Who Stay Behind Left Behind?," *Journal of Urban Economics* 64, no. 1 (2008): 123–45.