## WORTH THE PRICE? WEIGHING THE EVIDENCE ON CHARTER SCHOOL ACHIEVEMENT

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In the summer of 2004, the American Federation of Teachers (AFT) published data from the National Assessment of Educational Progress (NAEP) showing that average fourth-grade achievement is higher in regular public schools than in charter schools, both for students overall and for low-income students. For black students, a group that many charter schools are designed to serve, the analysis showed that average achievement is no better in charter schools than in regular public schools. These conclusions were reported in a front-page article in the *New York Times*. Their accuracy has not subsequently been challenged.<sup>1</sup>

Some charter school supporters claimed that the NAEP data provided only misleading information about the quality of charter schools because: (I) NAEP only assessed a single year (2003) of fourth-grade scores and so could not detect whether charter school scores were low because their students had even lower scores in earlier grades. If so, charter school students could have made more progress even if they still had not caught up to regular public school students by the fourth grade; (2) black and low-income students in charter schools are more disadvantaged than black and low-income students in

The National Center for Education Statistics (NCES) did subsequently reclassify twelve schools in its national sample from regular public to charter schools, but this reclassification did not affect the broad conclusions reached by the AFT in its earlier analysis.

regular public schools. To make valid comparisons of charter and regular public school test scores, more demographic information is required than simply whether students are minority or eligible for free or reduced-price lunches. Parental education, specific income levels, and home environment must also be controlled; and (3) charter school performance may be poor because so many charter schools are new, experiencing "growing pains" or "shakedown" problems; studies restricted to mature charter schools would show superior results.

While it is important to analyze these claims, it is curious that the average underperformance of charter schools came as such a surprise. The original intent of charter schools was to allow for experimentation; an expected outcome of experimentation in any field is many failures before successes are identified. While the controversy that erupted in the wake of the *Times* article focused on whether students in charter schools, on average, outperform students in regular public schools, it missed a more important policy discussion regarding the costs of pursuing charter school policies—weighing whether the successes are worth the failures. The costs of chartering policies include high student mobility, increased corruption and mismanagement of some deregulated schools, and more inexperienced and underqualified teachers working in schools with fewer hiring restrictions. Only then will we be able to say whether the underperformance of some charter schools is a price worth paying for the successes realized by others.

In a *New York Times* advertisement published eight days later, and in several other op-ed articles and web postings, some charter school supporters' criticism of the use of NAEP data to support claims about charter school underperformance made a lot of sense. NAEP scores themselves are not a sufficient basis to conclude that charter school performance is lacking. Nonetheless, there is extensive corroboration of this finding.

From NAEP itself, we can reasonably conclude that charter schools do not, on average, serve students who are more disadvantaged than superficially similar students in regular schools. Although NAEP reveals that charter schools have a higher proportion of black students than regular schools, black students in charter schools are apparently less disadvantaged, not more so, than black students in regular public schools. As Table 1 shows, while 76 percent of black students in regular public schools are low-income, only 68 percent of black students in charter schools are low-income. In central cities especially, black students are more likely to be low-income in regular public schools (83 percent) than in charter schools (72 percent). Only in rural schools are black students in charter schools more likely to be lunch-eligible than black students in regular public schools.

 Table 1
 Percent of Lunch-Eligible Students, by Race and Location

	PERCENT		
	Charter Schools	Regular Public Schools	Difference
Total	47	46	1
Central city	65	65	0
Urban fringe	29	36	-7
Rural	30	41	-11
Black Students	68	76	-8
Central city	72	83	-11
Urban fringe	49	64	-15
Rural	92	76	16

Note: Data are for students who took the NAEP Fourth Grade Math Assessment and who reported whether they were eligible for free or reduced-price lunch.

Source: NAEP 2005, supplemented by unpublished data furnished to the authors by the National Center for Education Statistics.

About 10 percent of charter school and 4 percent of regular public school students in the NAEP sample did not provide information about their lunch eligibility. Under the strongest assumptions about these nonresponders, the result holds that urban black students in charter schools are less likely to be lunch-eligible than their peers in regular public schools. If all nonresponders in the charter school sample are assumed to be lunch-eligible, and no nonresponders in the regular public school sample are assumed to be, then the low-income percentages for black students in charter and in regular public schools would be 71 and 74, respectively. For black students in central city charter and regular public schools, the low-income percentages would be 75 and 81, respectively.

Many studies have compared charter and regular public schools at the state level, and they usually confirm these NAEP data. We base this conclusion on an examination of every state-level study we could find that had been published or made available through April 2005.<sup>2</sup> In general, state studies show that charter schools have a higher proportion of black students but a lower proportion of lunch-eligible students than regular public schools. This probably means that black students in charter schools are less likely to be lunch-eligible than black students in regular public schools, because black students generally are more likely to be lunch-eligible than white students. This pattern—more black

More detailed descriptions of each of these state studies, including full bibliographic references, are provided in our book, *The Charter School Dust-Up* (Teachers College Press, 2005).

students but fewer lunch-eligible students—characterizes charter schools in California, Florida, Illinois, Massachusetts, Michigan, North Carolina, and Wisconsin. Other state studies cannot confirm this pattern because they did not collect adequate demographic data, but only one study, that of schools in the District of Columbia, suggests the opposite—black students are more likely to be lunch-eligible in charter than in regular schools.

In short, the notion that NAEP charter school scores are no better than those of regular public schools, among all students and particularly for black students, because charter school students are more disadvantaged is not supported by hard evidence.

Many anecdotal accounts, however, do suggest that charter school students are more disadvantaged than regular public school students who seem superficially similar. These anecdotes may be accurate, but the data we report here make sense because such schools are offset by at least as many unnoticed examples of charter schools where students are more advantaged than superficially similar students in regular schools.

And some anecdotes, however well-intentioned, are simply exaggerated. We examined, for example, Knowledge Is Power Program (KIPP) schools, a highly publicized network of grades 5–8 middle schools serving central city minority children. Charter school supporters (and KIPP leaders) often claim that KIPP serves the most disadvantaged students, but careful examination suggests otherwise. Where fourth-grade test scores are available for a KIPP school and for the neighborhood schools from which it draws, test scores of students who transfer to KIPP are consistently higher than neighborhood averages. Fourth-grade teachers in regular public schools who refer students to KIPP consistently report that they recommend their most able students, or those with the greatest parental support.

With access to cross-tabulated NAEP data by race, residence, and lunch eligibility that were not available in August 2004, we can now confirm that charter school test scores are not higher than those in regular public schools. As Table 2 shows, black students living in central cities and attending regular public schools are not only apparently less advantaged than black central city students in charter schools; they also do better academically, on average, in regular public than in charter schools. This is true in both math and reading and is statistically significant in math.

NAEP data also fail to confirm claims that charter school performance improves as schools gain experience. In both math and reading, charter schools that have been providing instruction for four years or more have lower scores than new charter schools.

These findings, too, are confirmed in state studies. Although a few find a charter school advantage in narrowly defined categories (for example,

 Table 2
 Fourth-Grade Test Scores of Black Students in Charter and Other Public Schools by Eligibility for Free and Reduced-Price Lunch and Location, 2003

	MATHEMATICS			READING		
	Charters	Other public	Difference (Charters less others)	Charters	Other public	Difference (Charters less others)
Lunch-eligible	210	212	-2	188	193	-5
Central city	208	211	-3	188	191	-3
Urban fringe	218	214	4	n/a	196	n/a
Not lunch-eligible	220	227	-6	208	211	-3
Central city	217	225	-8*	208	207	0
Urban fringe	226	229	-3	205	214	-9
Info n.a.	219	219	0	198	199	-1

Notes: Data on rural students not available.

Source: NAEP 2005, and unpublished data provided to authors by the National Center for Education Statistics.

California studies find that charter schools that converted from regular school status perform relatively well, but start-up charter schools do not), most find that charter school students perform less well than regular public school students. States where such is apparently the case include Arizona, California, the District of Columbia, Illinois (with the exception of Chicago), Michigan, North Carolina, and Texas (except for schools chartered by local districts). In other states, charter school students seem to do better in some grades but worse in others.

Seven studies (in Arizona, California, Florida, Michigan, North Carolina, and two separate studies in Texas) compare like students and estimate score gains for one or more cohorts as students progress from year to year. Three of these studies (the Florida and North Carolina studies published in this issue, and one study in Texas) make strong corrections for selection bias. Such studies meet or exceed the quality standard set by charter school supporters who signed the *New York Times* advertisement. Six of the seven studies (Arizona was the exception) estimate that gains were either the same in charter schools as they were in regular public schools or lower.

In sum, the results of state-level studies, including the most methodologically sophisticated ones, accord with the "no charter school achievement advantage" inferences drawn from the NAEP data, even though NAEP data were only for a single year and demographic controls were minimal. The state-level studies seem strongly to suggest that generally charter schools do not

<sup>\*</sup>Statistically significant at the 5% level.

outperform regular public schools even when the charter schools have had time to mature and shake out early problems. In a North Carolina study, when the strictest controls were used to correct for selection bias by comparing the same student's performance when that student transferred back and forth between charter and regular public schools, the effect on students of being in charter schools tended to be negative.

Start-up pains might be a valid reason to hold charter schools to a lower standard, but only if student transiency results from charter schools being new, not from a tendency of such schools to churn students more than regular public schools do. If students are new to charter schools (and not yet sufficiently at ease to express their academic potential) not because the schools themselves are new but because even established charter schools tend to be revolving doors for students, then student transiency cannot be an adequate excuse for low achievement, and charter schools should not be held responsible for it.

The authors of several state-level analyses point out that when choice is made available, school switching is quite common. The most extreme case is Arizona, where half of all students changed schools during the two years under study. In Texas and North Carolina, a high percentage of students also move in and out of charter schools. Students typically do more poorly when they first enroll in a new school. Students who switch frequently may do worse in "better" charter schools than they do in "worse" regular public schools.

Some might expect charter schools to reduce student mobility, because students can remain in these schools even after families move to different neighborhoods. In contrast, children who attend regular zoned schools do not usually have the option to remain in the same school. But this basis for stability in charter schools can be offset if choice becomes a habit for families who once exercise it. The data suggest that school shopping by charter school parents may be a more powerful influence than the opportunity to remain in a school of choice when residence changes, so on balance, charter schools increase student mobility.

Because changing schools has a negative impact on academic achievement, not only on individual students who change but also on other students in the schools, a downside of choice may be that the increase in student mobility causes positive impacts from more school options to be offset by negative impacts of increased school movement.

One claim made by critics of the AFT's analysis of the NAEP data was that although there are no standardized measures of gain scores by which a charter school's effectiveness could accurately be detected, this is not a serious problem because charter schools, unlike regular schools, are shut down if their student performance is inadequate. But evidence indicates that charter schools are rarely closed for poor academic performance. When they close, it

is almost always because of financial mismanagement (going broke or having funds stolen by unscrupulous charter operators), not because of a failure to meet academic goals.

The Center for Education Reform (CER), a prominent charter school promoter, published a list of all charter schools that had been closed by October 2002, and the reasons for closure. The center identified fourteen closures for academic reasons, representing less than half of I percent of all charter schools. In view of the extensive data showing that charter schools often post lower scores than demographically comparable regular schools, it is implausible that these fourteen schools represent a significant proportion of the low-performing charter schools that should be closed if there were true accountability for academic performance.

A cursory examination indicates that even the identification of fourteen closures is probably an exaggeration. Arizona has a higher proportion of students in charter schools than any other state; CER found two Arizona charter schools that were closed for academic shortcomings. One, however, voluntarily returned its charter after only a year of operation, too short a time for chartering authorities to evaluate test scores or other academic data. In the other, the school's chief executive abandoned the school, and enrollment fell below ten students. Although the school may also have had academic shortcomings, it was its virtual collapse that caused revocation of its charter.

The lack of a charter school achievement advantage suggests that if there are excellent charter schools that provide better educations than the regular schools from which students came, there are also many ineffective charter schools where education is worse. In average data, the better and worse may offset each other. NAEP strongly suggests, but does not prove, that most ineffective charter schools are not being closed, even after academic shortcomings become obvious.

Just as institutional inertia protects low-performing regular public schools from reform, it also protects low-performing charter schools from reform or closure. Charter schools often enjoy the support of organized political, parental, and community forces; it is much easier for state and district officials to ignore poor performance than to intervene and provoke unwelcome controversy. The insistence of some charter school supporters that NAEP data did not reveal real problems avoids addressing the failure to hold charter schools accountable, in view of the inevitable barriers to such accountability that exist in a democratic political environment.

Many charter school supporters have not resolved a theoretical ambivalence about whether market forces (parent choices) are sufficient regulatory mechanisms, or whether states should ensure that charter schools really do operate in ways that are likely to, and in fact do, raise student achievement. And this

conflict, in turn, reflects (and in some ways distorts) a deeper ambivalence that runs through the charter school movement. Are charter schools intended to give parents the ability to choose their own goals, whatever those goals might be, or should the public insist that public money be spent and charters granted only to pursue the public's goal of higher student achievement? If charter schools' purpose is the former, then it really shouldn't matter whether NAEP scores, or any other measure, indicate that average charter school performance is low; if parents are comfortable in schools that produce low achievement, they should be permitted to enroll their children in them.

Charter school proponents with this view should not only be unworried about low NAEP scores but should also be hesitant about the No Child Left Behind law and its national requirements for minimal academic sufficiency. If parental choice were a sufficient guarantee of school quality, then any regular public school in a district where parents can choose to remain in a zoned school (or switch to a magnet or charter) should be exempt from further accountability.

The negligible achievement differences between disadvantaged students in charter and regular public schools also raises questions about early charter school theory, which assumed that regular public school student performance was inadequate, especially for disadvantaged students, because union contracts and school district bureaucratic procedures prevent dedicated, creative, and innovative school leaders from developing new and more effective ways of running schools. Early charter school advocates argued that, freed from constraints of bureaucratic rules and union contracts, schools would improve instruction.

If, however, charter schools are not raising disadvantaged children's achievement, the cause of low student performance may not be bureaucratic rules. When a treatment doesn't work, it is prudent to examine not only whether the treatment should be improved, but also whether the diagnosis might be flawed.

The flaw stems from a failure of charter school proponents to distinguish between exceptional or anecdotal experiences and the typical experiences of schools. It is doubtlessly true that creative and effective school leaders, freed from bureaucratic regulations and union contracts, can design excellent schools that do a better job of educating disadvantaged children than do typical regular public schools.

But bureaucratic regulations and union rules do not exist for the purpose of suppressing creative practices. They mostly aim at preventing corrupt, incompetent, and ineffective practices. Freed from regulations, the best educators can design excellent charter schools. But freed from the same rules, the worst educators can also design terrible schools.

Financial management is one area where this has become clear. Many school districts are notorious for their bureaucratic mazes, but almost every rule can be traced to earlier reforms to curb corruption. Because purchasing department employees were once caught in kickback schemes, districts now require multiple signatures and reviews of major purchases. School principals in regular public schools often complain that civil service rules prevent them from firing janitors whose work is mediocre, but it is also nearly impossible for them to hire cousins or in-laws for maintenance positions, a practice that was once routine in public employment.

Charter schools are designed to avoid these rules and thus to enable principals to hire the most qualified people and to purchase supplies quickly and at low cost. As a result, many charter schools can function more efficiently. Some charter schools spend funds in creative ways that would be prohibited in the public school bureaucracy: one of the most widely noticed strategies is to hire younger teachers to work longer hours than regular public school teachers. Charter schools can pay these teachers more than young teachers in regular schools but less than typical teachers in regular schools, at the same overall payroll cost. The strategy requires that many teachers leave as they mature, but if a charter school can continue to attract young enthusiastic teachers who are inspired by the challenge, the strategy can be cost-effective.

But many other charter schools, freed from bureaucratic rules that are designed to ensure a minimum level of competence, have developed approaches that are ineffective. Some charter schools, freed from bureaucratic rules, are tainted by corruption and mismanagement, cronyism and nepotism. While the CER's survey found that fewer than I percent of charter schools had been closed for academic shortcomings, over seven times that many had been closed for financial or other mismanagement. Freedom from bureaucratic rules permits some charter schools to be unusually creative and others to be corrupt or inefficient. Many charter school supporters repeat anecdotal accounts only of the creative schools, but the evidence suggests that these are not predominant.

Many charter school supporters have seized upon evidence that teachers are more effective if they attended more selective colleges themselves, had higher test scores, or had more college coursework in subjects they were teaching, especially high school science and math. If so, charter schools could outperform regular public schools if freed from state teacher certification requirements, hiring teachers without formal training in education but with high test scores and degrees from more selective colleges.

But while some charter schools will hire more qualified teachers if freed from certification requirements, other charter schools will hire less qualified teachers. They are unlikely to post high performance if their teachers have neither high test scores and selective baccalaureates nor the pedagogical training, background in child development, and supervised practice that traditionally certified young teachers possess.

Data from the federal government's 1999 Schools and Staffing Survey (SASS) show that, on average, charter schools have probably not hired more qualified teachers. Charter schools were slightly more likely to hire teachers who had graduated from the most selective colleges (14 percent of charter school teachers vs. 10 percent of regular public school teachers). But on other available measures, charter school teachers seem to be less qualified. For example, the SASS data show that in mathematics, charter schools were less likely to hire teachers with extensive mathematics backgrounds. At the secondary level, where content knowledge is especially important, only 56 percent of charter school math teachers had extensive content knowledge in mathematics, compared to 70 percent of regular public school teachers.

For science, charter schools and regular public schools overall hired nearly the same percentage of teachers with a major or minor in science. But at the secondary level, where it most matters, only 67 percent of charter school teachers had college majors or minors in science, compared to 78 percent of regular public school teachers.

On average, teachers typically gain in effectiveness as they gain in experience, up to about five years, although a few studies find effects of experience that end earlier or later than five years. The SASS data show that charter schools have less effective teachers measured in this way. About twice the proportion of charter school teachers as regular public school teachers had five years' experience or less in 1999. This is a problem not only because of the inferior instruction that teachers who lack sufficient experience may deliver but also because the high concentration of inexperienced teachers in charter schools also deprives these teachers of opportunities for mentoring by more experienced teachers, one of the most effective ways in which teachers typically gain skill.

In sum, while freedom from certification rules undoubtedly permit charter schools to hire teachers who are more qualified than typical teachers in regular public schools, the data do not reveal evidence that charter schools consistently use their freedom to do so.

The more important question that policy makers should confront is not one that NAEP data stimulated—whether charter schools, on average, outperform regular public schools—but rather whether the underperformance of some charter schools is a price worth paying for the high performance of others. How much experimentation should we do on children, knowing that failures as well as successes may result? This is a much trickier public policy issue, and it has no easy answer.

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