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OCCASIONAL PAPER

Making Sense of Charter Schools

Evidence from California

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The charter school movement is a lightning rod of controversy for many in the education community. The debate over these schools often appears to be driven by theory and ideology, with little information on how the reform itself is affecting students. Claims and counterclaims often leave parents, educators, and policymakers confused. This occasional paper adds clarity to the debate by consolidating the results from the RAND Corporation's comprehensive assessment of charter schools.

Over the past several years, the California Legislative Analyst's Office and the Smith Richardson Foundation have provided support for RAND researchers to systematically assess various dimensions of charter school performance and their effects on traditional public schools. These evaluations have focused on charter schools in California. In 1992, California became the second state to adopt charter schools and now has more charter schools and students than any other state. A key feature of these evaluations has been the use of individual student-level data to track students from school to school over time and to measure their test scores in traditional and charter schools. The results of these evaluations paint a detailed picture of how charter schools are altering the landscape of public schools in California and may serve as a bellwether for the success of charter schools in other states.

The remainder of this occasional paper is divided into four sections. Section one describes what charter schools are and how they operate. Section two explains the debate over charter schools among educators and policymakers. Section three addresses the answers to five fundamental questions about the effects of charter schools. The final section summarizes the results and offers conclusions.

What Are Charter Schools?

Formally, charter schools are publicly funded schools of choice that form a contract, or "charter," with a public entity (e.g., a school district, state, or university) in which they are given greater autonomy than other public schools over curriculum, instruction, and operations. In exchange for greater autonomy, they are held accountable for results. School choice itself is also a defining feature of charter schools—parents *choose* to send their children to these schools. In contrast, students are typically assigned to a traditional public school based on their residential location. The choice feature inherent in charter schools means that these schools are reliant on their ability to attract students from their community.

Many of those involved with the initial charter movement do not think of charter schools as a *type* of school, but as schools that result from a chartering *process*. Ted Kolderie, who was instrumental in the formation and development of the charter movement, argues that the movement is really about a process of creating new schools (Kolderie, 2004). This process is a mechanism for pushing the educational establishment to move beyond transforming existing schools, which are often entrenched in an unresponsive bureaucracy. Thus, from the outset, the charter movement was created to start innovative schools that are outside the direct control of the local school board and, therefore, can be more responsive to the needs of their "customers."

What started out as an idea in the early 1990s evolved into a movement that now includes more than one million students in nearly 3,500 charter schools in 40 states and the District of Columbia. These schools vary considerably in their impetus, makeup, and design. Parents start some schools, while principals, teachers, or privately managed organizations start others. Some schools are large, with thousands of students, but most are small, with fewer than 200–300 students. Some have been converted from traditional public schools (conversion schools), while others start from scratch (startup schools). Some schools have traditional classroom settings, while others have much more radical designs in which students are instructed at home or through distance learning (often referred

to as "nonclassroom-based" schools). Because of these variations, it is difficult to paint a single picture of a charter school, which can lead to confusion over how they differ from other types of schools.

The Debate

The ultimate hope of charter school advocates is that charter schools will be able to cut through red tape, offer innovative educational programs, provide new options to families, and promote healthy competition for traditional public schools (Finn, Manno, and Vanourek, 2000). Opponents argue that charter schools are no more effective than traditional public schools, that they may exacerbate racial segregation, that they create fiscal strains for school districts, and that too many of them are unreliable operations (Wells et al., 1998). The critics have grown louder over time, concerned by some prominent scandals (such as the abrupt closure of a large network of charter schools in California just before the beginning of the 2004–05 school year) and by the steadily increasing amount of public resources consumed by the growing charter sector. The stakes have also been raised by the federal No Child Left Behind Act, which includes conversion to charter status among the sanctions that states may apply to chronically failing public schools.

As policymakers, educators, and parents wrestle with these issues, it is important not only to inform this debate with accurate assessments of these schools, but also to think more comprehensively about the schools' effects. In general, most of the current literature has narrowly focused on how charter schools affect achievement for students that attend these schools. However, we believe it is important to consider the possible impact charter schools are having more broadly, including their cost-effectiveness, systemic effects (e.g., effects on students who choose not to attend charter schools), distributional effects (both by ability and race/ethnicity), and any operational differences between charter and traditional public schools that may lead to broader educational innovations. This paper highlights findings across a number of RAND papers and reports about California's charter schools.

Policy Questions

Over the course of the last three-and-half years, our evaluations have examined five fundamental questions:

- How do charter schools affect the performance of charter students?
- What types of students do charter schools serve?
- Is charter school competition improving the performance of traditional public schools?
- Does the operation of charter schools differ from that of traditional public schools?
- Do charter schools receive sufficient monitoring from chartering authorities?

To answer these questions, we relied upon a rich variety of detailed student achievement records, surveys, and case studies of individual schools described below.

- *Student-level data*. We collected statewide data on individual student achievement tests administered in grades 2 through 11 in the spring of each academic year. However, these data do not include an individual student identifier to track individual student progress from year to year. Therefore, we also collected student-level data with individual identifiers from six districts with a large share of charter schools (Chula Vista, Fresno, Los Angeles, Napa Valley, San Diego, West Covina). Longitudinally linked student-level data provide information about the amount of time spent in different schools, student movement from traditional public schools to charter schools and vice versa, and differences in charter and traditional public school populations. The state and district data sets each encompassed five school years, from 1997–98 through 2001–02.
- *School surveys*. School-level information was also collected through a survey of principals in all California charter schools and a demographically matched set of traditional schools.
- *Case studies*. Research staff conducted detailed case studies of nine charter schools in the state. The visits were intended to identify how charter programs were implemented, as well as their challenges or achievements.
- *Other administrative data*. Other data came from a number of data sets including the financial and demographic data from Comprehensive Basic Education Data System (CBEDS), staffing data from the Professional Assignment Information Files (PAIF), and school-level performance indicators from the Academic Performance Index (API).

How Do Charter Schools Affect the Performance of Charter Students?

RAND's initial report, entitled *Charter School Operations and Performance: Evidence from California* (Zimmer et al., 2003), examined the student achievement of charter and traditional public school students. Using a within-student analysis,[1] we found comparable scores for charter schools relative to traditional

[1] More specifically, we used a student fixed-effects model to control for unobserved differences between charter and traditional public school students.

public schools. However, in this report, along with a journal article entitled "Student Achievement in Charter Schools: A Complex Picture" (Buddin and Zimmer, 2005a), we also found that charter school performance varies by school type (conversions versus startups and classroom- versus nonclassroom-based instruction). Students in conversion charter schools with classroom-based instruction have test scores similar to those of comparable students in traditional public schools, but students in startup charter schools with classroom-based instruction have slightly higher test scores than do comparable students in traditional public schools. In contrast, students in conversion or startup schools with some nonclassroom-based instruction (e.g., distance learning, independent study, and/or home schooling) have lower average test scores than do similar students in traditional public schools.

Because many urban leaders, including mayors and school district superintendents, have initiated charter schools as a mechanism to improve learning for disadvantaged students, we also examined the effects of charter schools on urban districts' student achievement generally and on different demographic groups, using data from Los Angeles and San Diego. Our results, presented in a paper entitled *Charter School Performance in Urban Districts* (Zimmer and Buddin, 2005b), suggest that achievement scores in charter schools are keeping pace with, but not exceeding, those in traditional public schools and are not consistently producing improved test scores for minorities above and beyond traditional public schools.

What Types of Students Do Charter Schools Serve?

Because charter schools are schools of choice, it is important to examine whether they are serving the full range of the student population and whether they are doing so in integrated settings. Charter school critics argue that charter success might be illusory if charter schools are simply recruiting the best students from traditional public schools or if they further stratify an already ethnically or racially[2] stratified system (Cobb and Glass, 1999; Wells et al., 1998). In general, these critics fear that charter schools may not only have negative consequences for the charter students who attend these schools, but if charter schools "skim off" high-achieving students, they may also have social and academic effects for students who remain in traditional public schools. However, proponents of charter schools argue that charter schools will improve racial integration by letting families choose schools outside of neighborhoods where housing is racially segregated (Finn, Manno, and Vanourek, 2000; Nathan, 1996).

While researchers have tried to address this debate through an analysis of school-level data, the best way to determine whether charter schools are affecting the distribution of students is to track the movement of individual students. In a paper entitled *The Effects of Charter Schools on School Peer Composition* (Booker, Zimmer, and Buddin, 2005), we used California student-level data to examine students as they transfer from traditional public schools to charter schools. By doing so, we more clearly answer whether transferring students are moving from heterogeneous schools, both by race and ability, to homogeneous schools, or vice versa. We also examined the characteristics of students who chose to attend a charter school.

Our analysis suggests that students who transfer from traditional public schools to charter schools have lower achievement scores prior to moving (in both math and reading) than their peers who choose to remain in a traditional public school. These results suggest that charter schools are not "cream-skimming" as critics fear, but rather attracting lower-performing students. The analysis also suggests that black students are much more likely than white students to choose to attend a charter school. Hispanics are slightly more likely, and Asian students are no more or less likely than white students to attend charter schools. When students transfer to a charter school, black students tend to transfer to schools that have a higher concentration of black students, while Asian, Hispanic, and white students tend to move to charter schools with a lower concentration of students of the same race. Together, these results suggest that charter schools are not becoming the "white enclaves" that many of the charter school opponents feared and are having little effect on the overall integration of students at the school level. However, these results do raise a potential concern that black students are shifting to charter schools that are less diverse than the traditional public school that they leave behind.

Is Charter School Competition Improving the Performance of Traditional Public Schools?

While much of the existing research on charter schools has focused on student achievement effects for students who choose to attend charter schools, we argue that this focus may be too narrow. Supporters hope that charter schools can exert healthy competitive pressure on the existing K–12 educational system

[2] For simplicity, we will refer to race/ethnicity as race throughout the rest of the paper.

by giving families alternatives to traditional public schools. In fact, given that charter schools will probably never educate a substantial portion of the nation's student population, charter advocates argue that these schools may have their greatest impact through systemic effects—the competitive effects of charter schools could improve the performance of traditional public schools and enhance the performance of students who do not attend charter schools.

The challenge in evaluating possible competitive effects is in knowing when district or school personnel will perceive a competitive threat. Do charter schools create competitive pressure when they are located near a traditional public school or when they first appear in a district? Do charter schools only create competitive pressure when they start recruiting students away from a particular school, or do they exert pressure when they capture a certain portion of students within a "marketplace"? Additionally, the local environment may influence the competitive pressure that charter schools create. For instance, some districts may have well developed, preexisting choice programs, including magnet schools or open enrollment policies. Also, some districts may be experiencing significant growth or already have overcrowded schools, in which case charter schools may act more like a "release" valve than a source of competitive pressure.

Bearing these factors in mind, we analyzed the competitive effects of charter schools in the six districts with longitudinal student-level data. In this evaluation, we combined student-level data to examine achievement effects with survey data from traditional public school principals in which we asked whether the introduction of charter schools had any effect on the operation of their own schools. The results of our analysis, reported in the paper entitled "Is Charter School Competition in California Improving the Performance of Traditional Public Schools?" (Buddin and Zimmer, 2005b), suggest that charter schools are having no measurable impact on the performance or operation of traditional public schools. Given the ambiguity in which competitive effects manifest, this analysis incorporated variables to control for the level of preexisting competition and also used various measure of competition. But even accounting for these considerations, we found no evidence that charter schools create a competitive effect. The absence of a competitive effect, however, could also be explained by the generally low share of students charter schools represent in any of these districts—never more than three percent—or by the fact that charter schools are acting as a release valve in these growing districts. It is possible that a broader implementation of charter schools (than that observed in California) would exert pressure on traditional public schools to improve their performance.[3]

Does the Operation of Charter Schools Differ from That of Traditional Public Schools?

One of the major arguments for charter schools is their ability to be innovative. However, because most of the charter school research has focused on student achievement, we know very little about the operation of these schools. In RAND's initial report, *Charter School Operations and Performance: Evidence from California* (Zimmer et al., 2003), we used survey data from charter principals and a matched set of traditional public school principals to examine differences in school operations. This analysis yielded some significant differences between traditional public and charter schools. First of all, when asked about the degree of control principals have over decisionmaking, charter school principals indicated, as expected, that they do have greater control than did traditional public school principals. Also, charter school principals, particularly in startup schools, report receiving less public funding per student than do traditional public school principals. Part of the difference in resources is explained by charter schools' lower rate of participation in categorical programs, such as the state's transportation funding program and the federal Title I program.[4] Charter school teachers have less experience and fewer teaching credentials than those in public schools, but they are more likely to participate in informal professional development.

In programmatic terms, charter schools report having more instructional hours in non-core subjects such as fine arts and foreign languages at the elementary school level. Startup charter schools have a smaller proportion of special education students than do traditional public schools and are much more likely to mainstream their special education students—i.e., serve them in a general education classroom—than are either conversion schools or traditional public schools.

[3] Another factor that may mitigate the competitive effects of charter schools is the broad education reforms instituted under No Child Left Behind (NCLB). In the past few years, NCLB accountability systems may be the primary motivator of public school performance, instruction, and operations. As a result, potential effects of charter competition may be overwhelmed by ongoing efforts to implement NCLB reforms. The test score data for our California analysis predates NCLB, however, and we still find no evidence of competitive pressure from charter schools improving test score performance in traditional public schools.

[4] Many charter schools are small, so the administrative cost in applying for special programs is larger relative to their expected funding from some of the programs. Also, some charter administrators are not fully aware of available funding opportunities.

Given this information, we then used the survey responses from both charter and traditional public schools to examine how variations in operational features and designs affect the performance of schools by merging these data with our statewide student-level data. In doing so, we begin to pry open the black box and see what educational strategies may be the most effective. Overall, we found few measures of school operations that predicted high performing schools.

The results, which are reported in the paper entitled *Getting Inside the Black Box: Examining How the Operations of Charter Schools Affect Performance* (Zimmer and Buddin, 2005a), suggest that the greater autonomy given to charter schools does not lead to improved student achievement in core subjects like reading and mathematics. In addition, while charter schools tend to provide more instructional hours in non-core subjects, greater emphasis in foreign languages is correlated to poorer math and reading test scores. Also, the analysis suggests that the greater the proportion of students instructed at home, the lower the test scores of the school. Other results vary by grade arrangements or school type. For instance, an emphasis on hiring teachers with full standard credentials has a positive effect in traditional public high schools, a negative effect in charter high schools, and no effect in middle and elementary charter or traditional public schools.

Do Charter Schools Receive Sufficient Monitoring from Chartering Authorities?

In RAND's initial report, *Charter School Operations and Performance: Evidence from California* (Zimmer et al., 2003), we surveyed chartering authorities and charter schools to examine the level of oversight and support charter schools experienced. From these surveys, we found that of the three types of chartering authorities available in California (school districts, county boards of education, and the California State Board of Education), most charter schools are authorized by school districts, and most districts have authorized only one school each. Few petitions for charter schools are formally denied, and, once authorized, only a handful have been revoked or closed. Compared with traditional schools, charter schools report greater control over school-level decisionmaking (as the law intends). Only a small fraction of chartering authorities collect accountability information such as student grades and promotion and dropout rates.

Because RAND's initial report found that charter schools offering instruction outside the classroom had lower levels of student achievement and because there is concern that these schools have a greater potential for misuse of public funds given their unique instructional design and freedoms, we conducted a follow-up study, entitled *Nonclassroom-Based Charter Schools in California and the Impact of SB 740* (Guarino et al., 2005). This study more closely evaluated the impact that recently enacted legislation had on these schools (the legislation was Senate Bill 740).

Nonclassroom-based schools differ from traditional schools in that they deliver instruction outside the confines of the classroom setting, including home-schooling and various forms of independent study and distance learning. These schools represent a growing number of the charter schools within California, and there are now over 120 of these schools within the state. In 2001, SB 740 was enacted to create greater fiscal oversight by requiring schools to meet certain thresholds of spending on instruction and certificated staff, and by requiring that schools not exceed the class sizes of nearby schools.

Using survey data and California administrative financial data, we found that since SB 740 was enacted, nonclassroom-based charter schools have greatly increased spending on both instruction and on staff members who hold education certificates, thus achieving two goals of the reform legislation. However, we also found that the reform law has placed an administrative burden on nonclassroom-based schools and has not triggered all of the changes aimed at instructional improvement that state lawmakers intended. For example, there was evidence that instead of hiring more teachers, as envisioned by the legislature, some schools may have increased the pay of existing teachers in order to meet instructional spending rules. The report concluded that the rigid state standards imposed under the reform legislation might not be the best way to improve oversight of the nonclassroom-based charter schools. The study also noted that by streamlining requirements for reporting financial information from nonclassroom-based schools, the state could maintain fiscal oversight of the schools but also reduce the administrative burden placed on smaller schools.

Summary and Conclusions

The charter movement grew out of a hope that by providing greater autonomy to schools, they would be able to cut through bureaucratic frustrations and offer innovative, efficient, and effective educational programs, provide new options to families, and promote healthy competition for traditional public schools. Our results from California show that charter schools generally perform on par with traditional public schools, but they have not closed the achieve-

ment gaps for minorities and have not had the expected competitive effects on traditional public schools. On a more positive note, they have achieved comparable test score results with fewer public resources than have traditional schools and have emphasized non-core subjects. The evidence shows that charter schools have not created "white enclaves" or "skimmed" high-quality students from traditional public schools—in fact, charter schools have proven to be more popular among black and lower-achieving students and may have actually created "black enclaves." Our analysis also suggests that oversight and accountability of these schools can be challenging, and we found that very few charter schools have been closed. Finally, we discovered few measures of school operations that predicted high performing schools. In particular, greater school autonomy associated with charter schools has little effect on student achievement.

Together, these results suggest that charter schools are not a "silver bullet" for school improvement. However, the results do provide some initial evidence that charter schools are creating schools with different educational designs. While the differences in educational designs may not lead to improved reading and math test score performance, some parents may appreciate programs that provide a greater emphasis on non-core subjects and alternative programs. For these reasons, coupled with the fact that charter schools typically use less public resources, we conclude that charter schooling is a reform initiative worth continuing in California.

Where Do We Go from Here?

In the fall of 2004, two studies by the American Federation of Teachers (2004) and Harvard economist Caroline Hoxby (2004) created a firestorm of debate over the competing claims of charter school performance nationwide. This debate played out in high-profile media outlets including *The New York Times* and *The Wall Street Journal*. However, both studies focused narrowly on student achievement and used point-in-time data, which is not conducive to analytic methods that factor out the various nonschool forces at work or the amount of time students spent in different schools. In addition, we argue that these studies are generally misguided in their attempts to find a *single* charter effect. In our analysis of California charter schools, presented through a series of reports and papers, we found that charter school performance varies within California by charter type. This suggests that charter school performance will vary as charter laws vary from state to state, and that studies of charter schools should consider other outcomes, such as systemic effects and distributional effects.

As the charter movement goes forward, it is important to examine under what local circumstances, governing laws, and instructional and educational designs charter schools are most likely to have positive effects on students who choose to attend these schools and on those who do not. Therefore, we call for a national study that incorporates longitudinal student-level data along with information on instructional and educational designs of schools to examine the impact charter schools have under differing charter laws, environments, and instructional and educational designs. Such a study would shed light on effective policies and practices for using charter schools as a mechanism for school improvement. ■

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