

# California's Charter Schools: Measuring Their Performance

#### CALIFORNIA'S FIRST CHARTER SCHOOL

opened in 1993. Since then, the numbers have grown steadily each year. Parents want to know if these schools are providing sound instruction, and local and state policymakers care about whether allowing schools more independence translates into higher student achievement.

The full report, published in June 2007, addresses two questions:

- How does the academic performance of charters differ from that of noncharters?
- How does the academic performance of different kinds of charter schools vary?

The report examines student performance as measured by state tests using a research method—statistical regression—to control for differences between schools in students' backgrounds and school size. The report also compares schools based on the measures used by the state for its accountability system. This includes statewide ranks, similar schools ranks, and success meeting growth targets.

### **Charter performance varied by grades**

This study controlled for differences in enrollment and I4 factors detailed in California's School Characteristics Index (SCI), which primarily reflects student demographics, such as ethnicity, parental education level, and English learner status.

Taking these differences into account, charter elementary schools scored lower than noncharter elementary schools on the 2006 Base Academic Performance Index (API). Although the effect is not large, it is fairly consistent with results using other measures. (See the third bullet in the box on this page for a list of these measures.) The effect was also stable over time. And notably, charters' 2006 math performance trailed noncharters' results by a larger margin than on the API.

On the other hand, both with and without controlling for differences in enrollment and SCI, charter middle schools scored higher than noncharters on the 2006 Base API. The effect is substantial and is consistent across all other measures analyzed as well. The results are also stable over time.

Results for charter high schools fall somewhere in between—positive but less consistent. After controlling for differences, charter high schools scored higher than traditional public high schools on the 2006 Base API. But results on other measures suggest that the story in English is different than in math. The two math indicators—percent proficient under adequate yearly progress (AYP) and the California High School Exit Exam (CAHSEE) math scale score—favor noncharters. Further, the results are not stable over time.

## Charters run by management groups generally performed well in 2006

Some charter schools in California are founded by, and receive ongoing assistance

from, management organizations. These organizations not only start and run charter schools, but they also develop curricula, share best practices, and streamline administrative costs. For this report, a management organization (MO) is defined as having been created to provide administrative support for multiple charter schools. It excludes all-charter districts and charters run by community-based organizations or educational agencies (such as the Conservation Corps) created to serve a different or broader purpose.

After controlling for differences in enrollment and SCI, schools run by MOs scored significantly higher than other charter schools on the 2006 Base API. The effect is substantial and holds for the AYP percent proficient measures in English and math as well.

#### **Methodology Used in the Report**

Three concepts guide this study's approach to comparing the performance of groups of schools:

- Trying to isolate the effect of being a charter school or a specific type of charter: Many factors affect schools' performance on standardized tests, including the background of the students, teacher qualifications and experience, and perhaps school size. This study is interested in whether being a charter or a specific type of charter also affects student performance. By statistically neutralizing differences in the first set of factors, it estimates the "charter effect" on performance.
- Looking for stability of results over time: Findings that hold consistently across multiple years are more
  credible than those that are more short-lived. This report replicates the main 2006 analyses with data
  from previous years and notes whether the results have been stable over time.
- Looking for consistency of results across multiple measures: Findings that are consistent across measures, as well as over time, are more robust and defensible. This study reports school-level results from multiple sources—Academic Performance Index (API), adequate yearly progress (AYP), California Standards Tests (CSTs), and California High School Exit Exam (CAHSEE)—to examine consistency of findings.

The analyses focused on a subset of schools with data from all of those measures so that the results would not vary from measure to measure because they reflected different sets of schools. A drawback to this approach is that some schools with partial data are excluded.

Not all factors that affect performance can be controlled for; thus this report cannot provide certainty that differences in achievement between charters and other public schools are due only to a school's status as a charter.

#### **Performance also varied by type of charter**

Among the charters included in this analysis, three-quarters are start-ups rather than conversions of existing schools. And four of five are considered classroom-based, with the remainder defined by the state as nonclassroom-based, meaning that at least 20% of their instructional time does not involve students on site under the direct supervision of a teacher.

### A comparison of conversions and start-ups yields mixed results

With the exception of elementary math performance on the California Standards Test (CST), start-up charter schools did not score significantly differently than conversion charters, after controlling for differences in enrollment and SCI.

Similar to the results from 2006, differences in previous years were generally not statistically significant. However, start-ups' lower CST math performance at the elementary level was present in prior years.

### Classroom-based charters outperformed nonclassroom-based charters

Nonclassroom-based elementary school charters scored lower than classroom-based charters on the 2006 Base API after adjusting for differences in enrollment and student characteristics. No results are reported for middle schools because there is only one nonclassroom-based school, and the high school results are not statistically significant. The most important differences between classroom- and nonclassroom-based charters are found in math scores, with nonclassroom charters trailing by statistically significant and relatively large margins.

### Basic unadjusted performance statistics allow for comparisons to previous EdSource reports

In past reports on charter school performance, EdSource did not perform regression analyses to "adjust" outcomes based on student characteristics and school size. Basic, unadjusted API data can facilitate comparisons to those past EdSource reports, and the growth target information shows how well charter versus noncharter schools improved from 2005 to 2006.

Charter schools' performance on the 2006 Base API and Similar Schools rankings is in some ways similar to the main findings in this report.

Charters' statewide ranks on the 2006 Base API show that elementary charters as a whole performed similarly to the entire set of California's elementary schools. In contrast, the set of charter middle schools had better absolute performance than the state's middle schools as a whole. The opposite is the case with charter high schools, with their performance skewing toward the low range.

In contrast to the Base API Statewide Rankings, which show schools' absolute performance, Similar Schools Rankings take into account the overall level of challenge that schools face and rank schools' performance on the API against those with roughly the same level of challenge (as measured by SCI values).

Elementary charters had a disproportionate share of schools that performed relatively poorly, given their student characteristics, which pulled the group's average performance down. On the other hand, charter middle and high schools had relatively large portions of schools that scored well, which produced a positive "charter effect" on the API.

#### Charters performed well on the 2006 Growth API

The Growth API indicates whether schools have met state-set goals for improvement from one year to the next. In the 2005 Base API/2006 Growth API cycle, schools were expected to improve their schoolwide API scores by 5% of the difference between their Base score and 800, the state's official

target score. (Schools with API scores of 800 and above were expected to keep their scores at 800+.) In addition, each "numerically significant subgroup" of students had a growth target that was 80% of their schools' targets.

In the 2006 Growth API, charters overall met both their schoolwide and subgroup targets in higher percentages than noncharters. This was true at all three grade levels. The pattern in 2006 was quite similar to what it has been in the last two API cycles—except that in 2005, charter high schools were less successful than noncharters.

# The report reveals intriguing issues that warrant further study

This EdSource analysis (a full copy may be downloaded at **www.edsource.org**) found several results that were significant and worthy of further investigation:

- In comparing charter schools to noncharter public schools, the strongest finding in this analysis—and one that has been consistent for several years—is the notable success of charter middle schools.
- Looking across different kinds of charters, the largest effects were found in schools belonging to management organizations.
- Finally, about one-quarter of the managed schools are middle schools and about onequarter of the charter middle schools belong to MOs. What is responsible for the high achievement of each group—the strengths of charter middle schools' instructional program or the practices of management organizations? Do the factors create a synergistic effect?

EdSource's annual analyses also indicate that the differences in performance between different types of charter schools is as relevant as comparing charter schools as a group to traditional public schools.

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