

California's Charter Schools: How Are They Performing?





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EdSource thanks **Reed Hastings** for supporting our capacity building and independent reporting on California charter school performance and related policy issues.

WHEN THE CONCEPT of charter schools was first implemented in California in 1993, the goal was to allow the modification of existing public schools or the creation of wholly new ones that would be less rule-bound than traditional public schools but more accountable for student achievement.

For some charter advocates, simply providing such alternatives that satisfy parents and students is enough to justify having charter schools. The large majority of supporters, however, see other potential benefits for education quality in general. Schools will compete for students and the funding that goes with them, the thinking goes, thereby motivating schools to improve and tailor their programs to meet students' needs just as competition in the marketplace can spur innovation, efficiency, and better service among private firms. Charter schools that cannot compete will close like unsuccessful business ventures do, they say. Or those that do not abide by the terms of their charter will have it revoked by their chartering agency. In contrast, they say, charters that succeed

can serve as models for other public schools—charters and noncharters.

When charter schools were first introduced in California, they were the only schools that could be closed because their students were not achieving. Today schools that do not make “adequate yearly progress” targets under the federal No Child Left Behind Act (NCLB) can eventually be shut down or reorganized. NCLB explicitly lists chartering as one option for reorganizing these schools. This new option—along with the belief in innovation and parent choice—is helping to fuel interest in the growing charter movement.

Today the state has 575 charter schools, with 20 more about to open soon. But California Department of Education (CDE) data indicate that since

1993, 174 charters that have been approved are not open now. Most of those closed voluntarily (109), but some had their charter revoked (41), and others never got off the ground (24). Fewer than one in five of today's charters were once traditional public schools. The rest were started from scratch. They serve all grades and operate throughout the state.

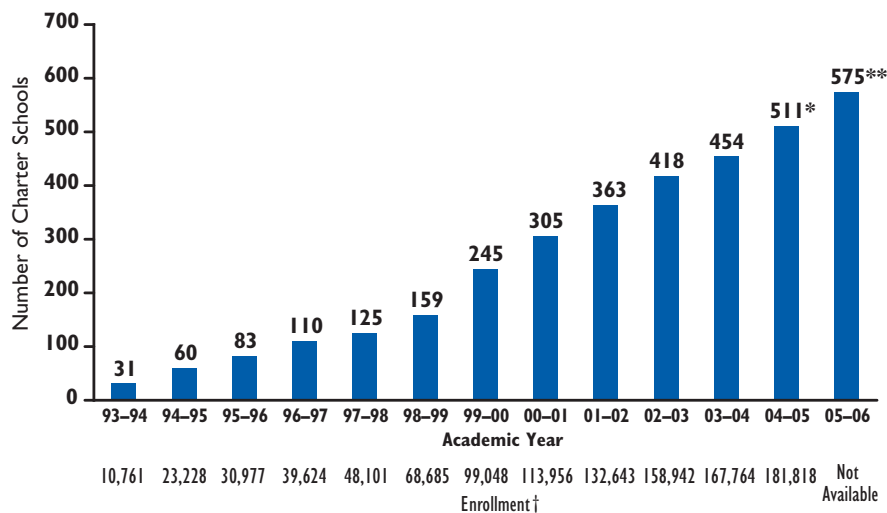
This report relies on schools that had performance data from the 2004–05 school year. That year charters constituted 5.4% of the state's schools but, because they tend to be smaller than regular public schools, enrolled only 2.9% of the state's students.

Because charter schools represent an educational alternative, statements about how charter schools are doing academically are more meaningful when their performance is juxtaposed with that of traditional schools.

As a group, charter schools as compared to noncharters have achieved some encouraging results in recent years. But some educators and policymakers urge caution in embracing this experimental approach to the important work of public education. Within the charter world, they say, schools vary tremendously in both how they deliver curriculum and how well their students are meeting the state's academic standards. Meanwhile, policymakers want more information on which types of charters appear to be most successful.

This report not only compares charters to noncharters, but also breaks charters down into types to unmask variations within the overall pattern. School types—elementary, middle, and high—are considered individually. Charters are further divided according to whether they are start-ups or conversions, classroom-based or not, and on a

figure 1 | The number of charter schools continues to grow each year



Note: To be counted among the schools open in a given year, a school must operate at a minimum from Nov. 1 through February.

*This number includes all charter schools open in 2004–05. Many of these schools were not included in this report's analyses because they were in the Alternative Schools Accountability Model (ASAM), lacked API growth data, or were not open as charters in both the 2003–04 and 2004–05 school years.

**None of the achievement data in this report corresponds to the 2005–06 school year.

†Enrollment data is not available for a few schools each year.

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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Measuring performance is a complicated task

Reporting on schools' academic performance is complex. The first decision is which measure to use.

Though it is subject to debate, most people think the best approach to using test data is to track the achievement of students over time and roll up those data into a school-level measure. However, California does not have a student tracking system and cannot support these types of analyses. Instead, the state looks at how one group of students did one year compared to how another group did the following year (e.g., last year's second-graders and this year's second-graders) to determine how a school as a whole, and subgroups within schools, performed. Some see merit in this latter approach because it retains the scores of students who have been at a school for one year or less.

Regardless of which approach is adopted, school-level performance measures have particular relevance in today's policy climate. Schools are held accountable for minimum performance for their students as a whole and by subgroup under both the federal No Child Left Behind Act (NCLB) and the state's Academic Performance Index (API).

NCLB's annual measurable objectives focus on the important goal of helping all students become proficient in English language arts and math. Schools are expected to have specified percentages of students demonstrate proficiency in these two subjects each year. Schools receiving financial assistance under Title I of NCLB that repeatedly fall short of these objectives face interventions and sanctions. Thus information on whether schools are meeting those proficiency objectives is a major indicator of performance. However, that measuring system does not show how far below or above the objective a school's performance is. Nor does it indicate whether a school's achievement is improving or declining. Finally, because the system focuses exclusively on proficiency, it does not measure improvement of students who fall short of proficiency.

In contrast, the API does show how a school's performance compares to a specific, high level of achievement and how much it is moving toward or away from that goal. It is sensitive to improvement along the proficiency continuum (from "far below basic" to "advanced"). And it measures achievement not only in English language arts and math, but also in science and social science.

Despite the API's limitations, this report relies on it because of its emphasis on measuring improvement and its inclusion of all four core academic subjects.

Then the question of which API data arises: state rankings for each school type (elementary, middle, and high) or "similar schools" rankings, which compare the performance of schools' of each type against the 100 schools most similar in student demographics, teachers' credentials, and other factors. Some schools rank high on one set and low on the other, prompting the question of which set of rankings is better to use.

In addition, the API system includes a regimen of setting annual growth targets in which schools—as a whole and within each "numerically significant" subgroup of students—are expected to improve toward a uniform objective (an 800 API score), or maintain their scores above 800.

In this report, EdSource focuses on comparing percentages of schools within groups that met both their schoolwide and subgroup API growth targets in 2005 and whether differences in those percentages are statistically meaningful. (Tests of statistical significance in this report are done at the 5% significance level.)

An upcoming EdSource report will look at performance based on similar schools rankings.

How the Academic Performance Index (API) works

Scores from a number of tests are used to form the API. Results from California Standards Tests (CSTs) figure most heavily. Those tests are scored in five proficiency levels: far below basic, below basic, basic, proficient, and advanced. Also factored in are results from a norm-referenced test, the CAT/6, administered to third and seventh graders and, for high schools, passing rates on the California High School Exit Exam.

Each year and for each school, students' test scores are summarized into one number, an API score. Within each school, API scores are also computed for "numerically significant subgroups" of students based on ethnicity and poverty status. (A subgroup is considered numerically significant if it has 100 students or it constitutes 15% of the student body and has at least 50 students.) API scores can range from 200 to 1000, with 800 being the goal. Based on how far the schoolwide score is from 800, the school gets an annual API growth target (5% of the difference between the first year's score and 800). Subgroups also get growth targets, which are generally 80% of the schoolwide target. The following year, schools receive another set of schoolwide and subgroup scores, which are compared to the prior ("Base") year's results to see whether targets were met. (Growth values are not computed for schools with any of the following: a majority of at-risk students, very small numbers of students, a sample of test-takers that is unrepresentative of the student body, or a significant change in the demographics of the student body from one year to the next.)

The API has its critics

Since no measure is complete or perfect, the API system is open to criticism. Some criticisms leveled at the API include:

- The API is a blunt tool for measuring schools' academic performance because it lumps all grades and all subjects together.
- Subgroup targets, which are generally 80% of schoolwide targets, underemphasize the need to close achievement gaps among ethnic groups.
- California's academic content standards—which form the basis of the CSTs and to a large extent the API—are too numerous and far-ranging to be covered in a standard school year.
- Some of the standards, which are quite specific, are irrelevant to careers and citizenship.
- The CSTs are not an accurate measure of mastery of the standards.
- The API weights results from some subjects more heavily than others based on the priorities of the State Board of Education, which are not universally shared.
- The API's 5% annual growth target was arbitrarily set by the Legislature without basis in research.

figure 2 | A significantly larger percentage of charter schools than noncharters met their 2005 API growth targets

Type of School	Number of Schools	Number (and %) of Schools Without API Data	Number of Schools with API Data	Of Those with API Data, Percent that Met 2005 Growth Targets
Noncharter	7,667	249 (3%)	7,418	67%
Charter	402	47 (12%)	355	73%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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cross-tabulation of those characteristics. These categories reveal patterns that merit further analysis to inform policy decisions.

In addition, this report uses data gathered from a spring 2005 EdSource survey of California's charter schools to compare the performance of charters providing differing amounts of instructional time and operating under varying degrees of autonomy. Because this is EdSource's second annual report on charter performance, it also looks at performance trends over the past two years.

Reporting on schools' academic performance is complex. Few believe that test scores should be the only measure. But state and federal policies place great importance on those metrics, and both parents and educators are following suit. Among the multitude of measures available, this report focuses on comparing percentages of schools—within types—that met both their statewide and subgroup Academic Performance Index (API) growth targets in 2005. (See the box on page 2.)

Because no one measure is complete or perfect, these comparisons can go only so far. A small difference between two types of schools one year could grow or reverse direction the following year. More importantly, this analysis does not fully control for student demographics, a factor that contributes greatly to academic performance. However, the

report does include differences in key student and school characteristics.

Thus, while this study does not isolate the impact that being a charter school—or a specific type of charter school—has on school performance, it does place performance data in context and provides information for further analysis.

Charters were more successful than noncharters in meeting growth targets
In 2005, 73% of charter schools met their schoolwide and subgroup API growth targets compared to 67% of noncharter schools. The difference in percentages is statistically significant, meaning that it is not likely the result of random variation.

This report considers the academic performance of 7,418 noncharter public schools and the 355 charter schools that:

- were open in both 2003–04 and 2004–05;
- were held accountable under the API system (as opposed to the Alternative Schools Accountability Model—explained below); and
- had a 2004 Base API score and a 2005 Growth API score. This means that for two consecutive years, the schools had a sufficient number and percentage of students tested in all relevant subjects to produce a representative sample of schoolwide performance.

In a comparison of those two sets of schools (see Figure 2), 73% of charter schools met their 2005 schoolwide and

subgroup targets and 67% of noncharter schools met theirs. The 4% of charter schools and 10% of noncharter schools in the Alternative Schools Accountability Model (ASAM), which serve primarily at-risk students, are not considered in these percentages because they did not receive growth targets.

The number of subgroups a school has and the diversity of its students could affect its performance

When comparing the percentage of charters and noncharters that meet their schoolwide and subgroup targets, one important factor to consider is the number of subgroups that each type typically has. Getting multiple subgroups to meet their growth targets is, according to Stanford University Professor David Rogosa, a bit like herding cats—difficult to get them all going in the same direction at the same time. His analysis of NCLB accountability measures shows that in theoretical schools with the same overall level of achievement, the probability of meeting all subgroup targets goes down slightly as the number of subgroups increases. (Rogosa uses “annual measurable objectives,” which pertain to the percent of students scoring proficient on California Standards Tests. See “To Learn More” on page 20.)

The most common number of numerically significant subgroups based on ethnicity that charters had in 2005 was one; noncharters most often had two. CDE defines subgroups as 100 students or 50 students that constitute at least 15% of the school's population. With fewer students in general, charters are less likely to have groups of students numerous enough to create such subgroups. (Because the subgroup of economically disadvantaged students would overlap with subgroups based on ethnicities, it could distort the comparisons and thus was not included.

Comparing charters to noncharters is complex

California's Academic Performance Index makes it relatively easy to report how an individual school scored on state tests in a single year, how it improved from one year to the next, and how its performance compares to other schools serving similar grades and students. What gets tricky is comparing groups of schools. This is especially true of charter and noncharter schools. Such comparisons are complex for a number of reasons.

The charter universe is ever-changing. New charters enter the scene every year, and a few merge, close, or have their charters revoked. Albeit not as dramatically, noncharters undergo change as well. Comparing within one year, or within a two-year API cycle, seems appropriate; but a multiyear look can involve groups of schools—especially the charters—that are substantially different in the first and last years. And focusing only on the charters that have existed for several years would not be representative of the population of charter schools.

It is not always easy to tell how charters and noncharters differ. Each group has schools that serve primarily at-risk students, the college-bound, or high concentrations of poor students. The primary factor distinguishing charters from regular public schools is the chartering process—drawing up a plan that specifies the school's instructional approach and goals and petitioning for approval.

Charters and noncharters often serve different grade configurations. As groups, both types serve the entire range of grades (K–12). However, charters have a slightly higher percentage of high school students and slightly fewer elementary students. The state accountability system places schools in only three categories: elementary (K–5), middle (7–8), and high (9–12). Charters in particular do not neatly fit into these configurations in part because some new start-up charters take on an additional grade each year. With the two sets of schools serving different grade spans—even within the three school types—analyses are oftentimes not strict “apples to apples” comparisons.

Student demographics are different among charters and noncharters. Charters generally serve fewer English learners and low-income students. (The measure of low-income students is questionable for charter schools because it is based on children eligible for free/reduced-priced meals, and some charters serving poor students do not operate such a program and thus are not identified as eligible.) However, if charters have fewer of these educationally disadvantaged pupils, it should help them more in their performance starting point (Base API score) than in their ability to meet state-set improvement goals (growth targets).

Information on student attitudes is not available. No one has data on students' attitudes toward schooling in general or their school in particular.

Thus it is not clear whether important differences in students exist between charters and noncharters. Generally students or their parents choose a charter school because they feel it will meet the students' needs, and students may be able to return to a regular district school if they are not happy. Thus charter students may tend to feel a better “fit” with their school than students in regular public schools, giving charters an advantage. However, why have charter students chosen their school? Are they looking for a more challenging academic environment, or are they there because they have struggled to succeed in school and charters represent a last attempt at success? Or do they see the charter school as the “lesser of two evils,” or pick the charter simply because it is closest to home? Charter schools undoubtedly have some mixture of these types of students. But is that mixture comparable to regular public schools and does it affect students' test performance?

The two types of schools differ dramatically in size. Charters are generally quite a bit smaller than noncharters, especially at the high school level where the median charter school is about one-seventh the size of the median noncharter high school. Some research suggests that small size alone is correlated with students' success, while other research disputes that claim. However, because the charter philosophy often emphasizes the benefits of smaller schools, the impact of smallness could be considered part of the charter effect.

Funding levels are different. Charters tend to receive more discretionary dollars but less overall funding than regular public schools. The difference, according to a 2003 RAND evaluation of the state's charter schools, is primarily because many charters, especially start-ups, do not participate in large categorical programs such as the federal Title I. In addition, many charter schools—in particular start-ups—must spend a portion of their funds on facilities. But charter schools tend to receive more revenues from nongovernment sources, such as private donations and foundations. RAND found that charter schools on average received \$433 per student from these sources while comparable mainstream schools received \$83.

Missing performance data complicate comparisons. For a portion of both charters and noncharters, the state cannot report whether the schools met their API growth targets. Of schools considered for this report, 12% of charters and 3% of noncharters do not have API scores. (Schools in the Alternative Schools Accountability Model, which do not receive growth targets, are excluded from the computation of those percentages.) With data missing for a portion of both types of schools, firm conclusions about the performance of those groups of schools (especially charters, which are fewer in number and have a greater percentage of missing data) are somewhat compromised.

figure 3 | **A greater portion of charter schools compared to noncharters did not have Growth API data in 2005**

	Number of Noncharters	Number of Charters
Number of Schools Without Growth Data	249 (3% of schools)	47 (12% of schools)
Reasons for Not Having Growth API Data:		
Did not have 2004 Base API.	136	31
Base and Growth scores are not comparable because of significant change in student demographics.	5	2
Was in the Alternative Schools Accountability Model in 2003–04 but in the API system in 2004–05.	0	1
School's results were not representative of student body because 10+% of students were excused from testing by parents.	9	3
Test integrity was compromised by adults at the school, affecting 5+% of students ("adult testing irregularities").	4	0
For at least one Standardized Testing and Reporting (STAR) content area used in the API, the school did not test a significant proportion of students who were not excused from testing by parents.	2	2
Had fewer than 11 valid STAR scores.	92	7
School had exit exam but not STAR results.	1	1

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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Subgroups for Special Education students and English learners also were not included because they too would overlap and separate scores for those two subgroups were not reported in the 2005 Growth API.)

In addition, charters tend to be less ethnically diverse, possibly making the job of teaching less complex. The Education Data Partnership website's Ethnic Diversity Index provides a measure for this. The index indicates how evenly students are spread among seven ethnic groups, with "100" meaning that the school's students are spread equally among seven groups and "0" meaning that all students belong to only one group. The median charter covered in this report had an index of 29, while the median noncharter had an index of 35. (See: www.ed-data.k12.ca.us)

Charter growth data are more likely to be missing than noncharter data

Also important to note when making such comparisons is the substantial portion—12%—of charter schools (representing about 17,000 students) that did not have growth data, compared to only 3% of noncharters. (ASAM schools were excluded from these calculations.) Charters without data were disproportionately high schools. Although charter high schools made up one third of the 355 charters covered in this report, they comprised 60% of those without data.

For both charters and noncharters, the primary reason for not having Growth API data was that the school did not have a 2004 Base API score to compare to. The main reason for not having a Base API was a failure to test a significant portion of

students. (Students excused from testing by their parents were not counted in this group.) Other reasons included not having 11 or more valid test scores—which compromises statistical soundness and student privacy because students are very few in number—and not having a representative sample of students to test after 10–20% of students had been excused by their parents. Figure 3 shows the exact counts of schools associated with each reason given for not receiving a growth score in 2005.

Elementary and middle charters were more likely to meet their growth targets

Greater percentages of elementary and middle charter schools met their 2005 API growth targets than their regular public school counterparts. A slightly lower percentage of charter high schools than regular high schools met theirs. Only at the elementary level was the difference statistically significant: 78% of charters met their growth targets compared to 68% of noncharters. With smaller groups of schools at the middle and high school levels, differences in the percentage of schools meeting growth targets would have had to be very large to be statistically significant.

The following section compares charter schools at each grade span to their noncharter counterparts. Dividing charters by grade span served is reasonable because the state's expectations for each type of school (elementary, middle, and high) are different and performance data are generally tracked and reported based on these three grade-level divisions. In addition, the charter movement may be having a bigger impact on high schools as support has increased for creating alternatives to the large comprehensive high school. Although charter schools in 2004–05 made up only 4% of schools statewide at the elementary and middle school levels, they account for 9% of high schools. (Because of their small size, however, charter high schools serve only about 4% of the

Key Characteristics of California Elementary Schools* in 2004–05

Median: shows the percentage for a “typical” school—one at the 50th percentile for a given characteristic. Equal numbers of schools have higher and lower percentages. The median is used because extreme values can skew an average, especially for the relatively small number of charter schools. The statewide proportions of certain categories of students and teachers can be quite different from even the noncharter medians. For example, the median percentage of Hispanic/Latino students in noncharter elementary schools is 41%, while the statewide proportion of Hispanics is 50%.

Range for middle half: shows the spread of values from the 25th to the 75th percentiles. It provides a sense of how schools within each group vary.

	Charter Schools (197 included)	Noncharter Schools (5,200 included**)
Student Characteristics	Median Range for Middle Half	Median Range for Middle Half
English Learners	5% 0%–28%	24% 9%–46%
Hispanic/Latino	19% 8%–53%	41% 18%–71%
White	56% 8%–75%	28% 7%–58%
African American	4% 1%–10%	3% 1%–9%
Asian	2% 0%–5%	3% 1%–9%
Free/Reduced-priced Meals†	42% 19%–75%	59% 29%–82%
Parents Not High School Grads	4% 0%–16%	15% 4%–33%
One or More Parents a College Grad	25% 11%–34%	15% 7%–27%
Students New to School (excluding the students in the entry grade)	22% 13%–34%	17% 12%–22%
School Characteristics		
Enrollment	250 170–478	553 414–727
Teachers Not Fully Credentialed	9% 0%–23%	3% 0%–8%
Teachers with Less than Two Years of Experience	18% 9%–33%	8% 3%–14%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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*INCLUDES ONLY SCHOOLS WITH 2005 GROWTH API DATA.

**FOR EACH VARIABLE, DATA MISSING FOR 0–6 SCHOOLS.

†DOES NOT INCLUDE SCHOOLS REPORTING 0 STUDENTS ENROLLED IN THE FREE AND REDUCED-PRICED MEALS PROGRAM BECAUSE SOME CHARTERS HAVE STUDENTS ELIGIBLE FOR THE PROGRAM BUT DO NOT OFFER ONE.

state’s high school students, enrolling a little more than 80,000 students in 2004–05.) Furthermore, in the past five years, growth in the number of charters has been greatest among high schools.

A limit to this analysis is that charter schools are less likely than noncharters to fit neatly into the traditional grade configurations. For this report, schools are classified as elementary, middle, or high just as the California Department of Education (CDE) classifies them for the API. The CDE generally classifies schools based on the number of grades a school has in the “core” grade spans of K–5, 7–8, and 9–12. That is, a K–8 school (the most common charter school grade configuration—in 73 of 355 schools) would be considered an elementary school because it has six grades in the K–5 span and two in the 7–8 span. However, if a school has grades in all three spans, it is classified according to the largest enrollment in a core span served. For example, a school serving all K–12 grades (a common configuration among charters) would be classified as a high school if most of its students were in grades 9–12. (There are exceptions to these rules, however. For more details, see “To Learn More” on page 20.)

The following section also considers the differences in student and school characteristics between charters and noncharters at each grade span. Although student characteristics are important, using a measure of improvement (making growth targets) rather than a snapshot of an individual year’s performance (a school’s API score) somewhat reduces the importance of student characteristics, such as ethnicity and poverty. The data measure the change from individual schools’ starting points rather than comparing those starting points. This assumes, of course, that within individual schools, student characteristics as a whole

figure 4 | **A significantly higher percentage of California elementary charter schools met their 2005 API growth targets than their noncharter counterparts**

Type of School	Number of Schools	Number (and %) of Schools Without API Data	Number of Schools with API Data	Of Those with API Data, Percent that Met 2005 Growth Targets
Noncharter	5,313	113 (2%)	5,200	68%
Charter	214	17 (8%)	197	78%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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figure 5 | **A higher percentage of charter middle schools met their API growth targets than their noncharter counterparts, but the results were not statistically significant because there were so few middle-grade charters**

Type of School	Number of Schools	Number (and %) of Schools Without API Data	Number of Schools with API Data	Of Those with API Data, Percent that Met 2005 Growth Targets
Noncharter	1,210	20 (2%)	1,190	66%
Charter	44	2 (5%)	42	76%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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do not dramatically change within the two years of an API cycle. If a school experiences a large change, it can ask that it not receive an API score because of the lack of comparability.

Elementary charters compare favorably to mainstream elementary schools in meeting API growth targets

In the 2005 Growth API, elementary charters were largely successful in meeting their targets. Altogether 78% of elementary charter schools reached their state-set improvement goals, which compares favorably to the 68% of noncharter elementary schools that met theirs. The difference is statistically significant. (See Figure 4.)

This performance data is based on the following breakdown of elementary charter schools:

- 214 were in the API system of accountability in the 2004/2005 cycle (compared to 56 in 1999/2000). Of these, 197 schools—92%—had the data necessary to determine whether they met their growth targets.
- The 197 schools served 71,500 students.

As the table on page 8 shows, these charter elementary schools tended to have greater percentages of teachers with less than two years' experience and teachers less than fully credentialed. On the other hand, charters had smaller percentages of students from groups that traditionally score lower on standardized tests. For example, charter students were much less likely to be English learners or to have parents without a high school diploma

and were considerably more likely to have at least one college-educated parent.

In each two-year API cycle, the first year is the "Base" year, against which scores from the second ("Growth") year are compared. In the Base API, schools of the same type (elementary, middle, or high) are ranked in 10 bands, called deciles, with each decile representing 10% of schools. This means that about 30% of schools overall occupy the three high-performing deciles, 40% fall in the mid-performing deciles (4–7), and the remaining 30% are in the three low-performing deciles.

Elementary charters' 2004 baseline performance levels shown below are similar to those of elementary schools overall:

- High-performing, deciles 8–10: 27% (53 schools)
- Mid-performing, deciles 4–7: 40% (78 schools)
- Low-performing, deciles 1–3: 33% (65 schools)

(Note that one of the 197 elementary charters did not have valid 2005 Growth API data.)

Charter middle schools compare favorably to noncharter middle schools in meeting growth targets, but they are few in number

In 2005, 76% of charter middle schools with API growth data met their targets, as compared to 66% of noncharter middle schools. (See Figure 5.)

But because charter middle schools were few in number, there is a great deal of statistical uncertainty about observed differences. Even a difference of 10 percentage points (76% versus 66%) is not statistically significant, and the analysis cannot rule out the possibility that the differences are the result of random chance. Other important facts about charter middle schools in the 2004 Base/2005 Growth API cycle include:

- 44 charter middle schools were in the API system of accountability in the

Key Characteristics of California Middle Schools* in 2004–05

Median: shows the percentage for a “typical” school—one at the 50th percentile for a given characteristic. Equal numbers of schools have higher and lower percentages. The median is used because extreme values can skew an average, especially for the relatively small number of charter schools. The statewide proportions of certain categories of students and teachers can be quite different from even the noncharter medians. For example, the median percentage of Hispanic/Latino students in noncharter middle schools is 39%, while the statewide proportion of Hispanics is 48%.

Range for middle half: shows the spread of values from the 25th to the 75th percentiles. It provides a sense of how schools within each group vary.

	Charter Schools (42 included**)	Noncharter Schools (1,190 included†)
Student Characteristics	Median Range for Middle Half	Median Range for Middle Half
English Learners	5% 2%–27%	15% 7%–30%
Hispanic/Latino	27% 17%–68%	39% 18%–66%
White	37% 2%–60%	30% 10%–59%
African American	7% 2%–14%	4% 1%–10%
Asian	4% 1%–7%	4% 1%–9%
Free/Reduced-priced Meals†	41% 22%–88%	52% 27%–72%
Parents Not High School Grads	8% 3%–27%	16% 6%–33%
One or More Parents a College Grad	21% 11%–34%	17% 9%–27%
Students New to School (excluding the students in the entry grade)	15% 10%–37%	14% 10%–19%
School Characteristics		
Enrollment	271 159–471	899 645–1,188
Teachers Not Fully Credentialed	28% 4%–53%	7% 3%–15%
Teachers with Less than Two Years of Experience	30% 10%–50%	11% 6%–17%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

*INCLUDES ONLY SCHOOLS WITH 2005 GROWTH API DATA.

**FOR EACH VARIABLE, DATA MISSING FOR 0–1 SCHOOLS.

†FOR EACH VARIABLE, DATA MISSING FOR 0–3 SCHOOLS.

†DOES NOT INCLUDE SCHOOLS REPORTING 0 STUDENTS ENROLLED IN THE FREE AND REDUCED-PRICED MEALS PROGRAM BECAUSE SOME CHARTERS HAVE STUDENTS ELIGIBLE FOR THE PROGRAM BUT DO NOT OFFER ONE.

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2004/2005 cycle (compared to 13 in 1999/2000). Of these, 42—95%—had the data necessary to determine whether they met their growth targets.

- The 42 schools served 18,261 students.

Similar to elementary schools, charter middle schools generally served fewer disadvantaged pupils but had teachers with less experience and fewer credentials relative to other public middle schools. (See the table on this page.) However, the differences in student demographics between charter and noncharter middle schools, though substantial in some cases, tended to be smaller than the differences found at the elementary level. For example, the percentage of students with at least one college-educated parent and the percentage of new students in 2004–05 were quite similar in charter and noncharter middle schools. On the other hand, differences in school size and staff qualifications were greater than those seen in elementary schools.

In the 2004 Base API, charter middle schools placed relatively high in the statewide rankings:

- High-performing, deciles 8–10: 43% (18 schools)
- Mid-performing, deciles 4–7: 33% (14 schools)
- Low-performing, deciles 1–3: 24% (10 schools)

Charter high schools lag noncharters in meeting growth targets, but the results are not statistically significant

The high school level is the only one in which charters did not compare favorably to noncharter public schools. As Figure 6 on page 10 shows, 64% of charter high schools with API growth data met their targets, as compared to 67% of noncharter high schools. This difference is not statistically significant.

The number of charter high schools has grown rapidly as support has increased for creating alternatives to the traditional

comprehensive high school. For the 2004 Base/2005 Growth API cycle:

- 144 charter high schools were in the API system of accountability in the 2004/2005 cycle (compared to 25 in 1999/2000). Of these, 116 schools—81%—had the data necessary to determine whether they met their growth targets.
- The 116 schools served 53,320 students.

Overall the student demographics were fairly similar at charter and noncharter high schools, except that charter schools had fewer English learners and more students new to their schools. But sizeable differences were found in teacher qualifications, with less qualified teachers in charter schools. (See the table on this page.)

The greatest difference between charter and noncharter high schools, however, is in the size of their enrollments, with the median charter being one-seventh the size of the median noncharter. (The median means that half the schools are larger and half are smaller.)

In the 2004 Base API, charter high schools placed relatively low in the statewide rankings despite serving slightly more advantaged students on the whole:

- High-performing, deciles 8–10: 22% (25 schools)
- Mid-performing, deciles 4–7: 31% (36 schools)
- Low-performing, deciles 1–3: 47% (55 schools)

Noncharter 10th graders also outperform their charter school counterparts on California High School Exit Exam results

Students in the class of 2006 and beyond must pass the California High School Exit Exam (CAHSEE) to graduate. First given to students in the spring of their sophomore year, the CAHSEE tests middle-school math (including Algebra I) and 8th- to 10th-grade English standards.

Key Characteristics of California High Schools* in 2004–05

Median: shows the percentage for a “typical” school—one at the 50th percentile for a given characteristic. Equal numbers of schools have higher and lower percentages. The median is used because extreme values can skew an average, especially for the relatively small number of charter schools. The statewide proportions of certain categories of students and teachers can be quite different from even the noncharter medians. For example, the median percentage of Hispanic/Latino students in noncharter high schools is 31%, while the statewide proportion of Hispanics is 41%.

Range for middle half: shows the spread of values from the 25th to the 75th percentiles. It provides a sense of how schools within each group vary.

	Charter Schools (116 included**)	Noncharter Schools (1,028 included†)
Student Characteristics	Median Range for Middle Half	Median Range for Middle Half
English Learners	3% 3%–14%	10% 3%–21%
Hispanic/Latino	24% 10%–45%	31% 14%–55%
White	50% 9%–74%	41% 17%–66%
African American	5% 1%–16%	3% 1%–9%
Asian	1% 0%–4%	3% 1%–9%
Free/Reduced-priced Meals†	39% 21%–67%	33% 16%–54%
Parents Not High School Grads	9% 4%–23%	14% 6%–27%
One or More Parents a College Grad	23% 15%–32%	21% 13%–30%
Students New to School (excluding the students in the entry grade)	40% 18%–60%	11% 8%–17%
School Characteristics		
Enrollment	241 132–408	1,728 616–2,419
Teachers Not Fully Credentialed	20% 5%–44%	8% 3%–15%
Teachers with Less than Two Years of Experience	25% 13%–46%	11% 6%–16%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

*INCLUDES ONLY SCHOOLS WITH 2005 GROWTH API DATA.

**FOR EACH VARIABLE, DATA MISSING FOR 0–2 SCHOOLS.

††FOR EACH VARIABLE, DATA MISSING FOR 0–17 SCHOOLS.

†DOES NOT INCLUDE SCHOOLS REPORTING 0 STUDENTS ENROLLED IN THE FREE AND REDUCED-PRICED MEALS PROGRAM BECAUSE SOME CHARTERS HAVE STUDENTS ELIGIBLE FOR THE PROGRAM BUT DO NOT OFFER ONE.

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figure 6 Although a larger percentage of noncharter high schools met their 2005 API growth targets than their charter counterparts, the results are not statistically significant

Type of School	Number of Schools	Number (and %) of Schools Without API Data	Number of Schools with API Data	Of Those with API Data, Percent that Met 2005 Growth Targets
Noncharter	1,144	249 (3%)	1,028	67%
Charter	144	28 (19%)	116	64%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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figure 7 Significantly more noncharter 10th graders passed the CAHSEE in 2004–05 than charter school sophomores

Type of School	Number of Schools	Percent of 10th Graders Passing California High School Exit Exam (CAHSEE)	
		Math	English
Noncharter	1,927	75%	77%
Charter	216	62%	74%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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In 2005 a greater percentage of sophomores in noncharter high schools passed the CAHSEE than their charter counterparts. As opposed to API results, the differences in the CAHSEE results were statistically significant in part because the comparison looked at students rather than schools and there are many more students than there are schools with API results. (Note that there is some overlap of CAHSEE and API results because the CAHSEE accounts for about 20% of a typical high school's API score.)

The difference between noncharter and charter students is most notable in math. On this section, 75% of noncharter students passed while only 62% of charter students were successful. Noncharter 10th graders also outperformed their counterparts on the English language arts section, with 77% of noncharter students passing compared to 74%. (See Figure 7.)

In comparing the CAHSEE results of noncharter and charter schools, differences in student populations—such as the number of low-income students or English learners—are especially salient. With API growth targets, the emphasis is on how schools of each type compare to *themselves* from one year to the next. With CAHSEE results, the focus is on the difference *between two school types*—noncharter and charter. This means that differences in student populations between these two types of schools would likely affect CAHSEE results more than API growth targets.

Perhaps surprisingly, charter high schools appear to serve a more advantaged population of students despite their poorer CAHSEE results. But this may not tell the whole story. Among the 216 charter schools represented in the chart above, 100 were considered

“nonclassroom-based” schools. (See the box on page 13.) These schools served 48% of charter 10th-grade test-takers. Often students in nonclassroom-based charters have struggled in the regular school system.

Comparing performance by charter type gives a more nuanced view

Based on available data, charters most similar to mainstream public schools—those that are conversions and those that are classroom-based—were more likely to meet their 2005 API growth targets than their counterparts (start-ups and nonclassroom-based schools).

Because charter schools are so diverse, it is also useful to break them into groups that are more similar to see if one type of school is more successful at meeting growth targets than another. In this report, EdSource compares nonclassroom-based with classroom-based charters and those established from scratch (“start-ups”) with those converted from an existing public school (“conversions”).

Start-up charters are more prevalent than conversions

Start-ups began as charter schools and make up more than three-quarters of the charters—and 63% of charter enrollment—covered in this analysis. A start-up often represents one person's or group's brainchild that exists independent of a district context. It typically begins as a new enterprise in which roles, relationships, and processes are all created.

Conversion charters, unlike start-ups, were once regular public schools whose staff petitioned to convert them to charter status. Presumably a conversion school decided to break away from some state and/or district office policies and regulations on curriculum, finance, the academic calendar, or other major issues. The new charter status is likely overlaid onto an existing school culture and ongoing staff and community rela-

tionships. A small handful of schools that have recently become charters may represent an exception. Under the federal No Child Left Behind Act (NCLB), a district may convert schools that repeatedly fail to meet state-set performance targets into charters. For schools that have been converted under NCLB, the culture and relationships may have changed considerably.

These generalizations may not fit every school officially categorized as a conversion or start-up.

A large majority of charters are classroom-based schools

Charters with a traditional classroom system are considered classroom-based. They make up four-fifths of all charter schools—and 74% of charter enrollment—included in this analysis.

A nonclassroom-based charter school is one that does not require its pupils to be on-site under the direct supervision of a teacher for at least 80% of the instructional time. Schools that provide a substantial portion of their instruction through home schooling, independent study, or distance learning (instruction via Internet-connected computers) generally fit that definition as do schools that rely on community-based learning through internships and field trips.

Missing data is an issue

In considering which types are more successful, note that both classroom-based and conversion charters are more likely to resemble traditional public schools than their counterparts.

However, as shown in Figures 8 and 9 on page 12, a substantial portion of two types of charter schools did not have API data, making it more difficult to compare performance in a meaningful way. About 14% of start-ups and nearly a third of nonclassroom-based charters did not have growth data.

Key Characteristics of Conversion and Start-up Charter Schools* in 2004–05

Median: shows the percentage for a “typical” school—one at the 50th percentile for a given characteristic. Equal numbers of schools have higher and lower percentages. The median is used because extreme values can skew an average, especially for small numbers of schools.

Range for middle half: shows the spread of values from the 25th to the 75th percentiles. It provides a sense of how schools within each group vary.

	Conversion Charters (80 included**)	Start-up Charters (275 included†)
Student Characteristics	Median Range for Middle Half	Median Range for Middle Half
English Learners	12% 4%–49%	2% 0%–16%
Hispanic/Latino	30% 16%–67%	20% 8%–44%
White	45% 12%–65%	51% 6%–75%
African American	3% 1%–8%	5% 2%–14%
Asian	3% 1%–8%	2% 0%–4%
Free/Reduced-priced Meals‡	40% 17%–76%	42% 22%–74%
Parents Not High School Grads	11% 2%–41%	5% 2%–17%
One or More Parents a College Grad	24% 11%–34%	23% 14%–33%
Students New to School (excluding the students in the entry grade)	13% 10%–23%	29% 18%–48%
School Characteristics		
Enrollment	486 304–814	218 142–365
Teachers Not Fully Credentialed	5% 0%–10%	18% 2%–40%
Teachers with Less than Two Years of Experience	12% 6%–22%	25% 13%–45%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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*INCLUDES ONLY SCHOOLS WITH 2005 GROWTH API DATA.

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figure 8 | **Conversions were more likely than start-up charters to meet their 2005 API growth targets, but the results were not statistically significant**

Type of Charter School	Number of Schools	Number (and %) of Schools Without API Data	Number of Schools with API Data	Of Those with API Data, Percent that Met 2005 Growth Targets
Conversion	84	4 (5%)	80	80%
Start-up	318	43 (14%)	275	71%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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staff and students. When considering the relatively crude measure of the percent of schools meeting growth targets, however, the age of a school did not seem to have much of an effect—older and newer start-ups performed very similarly. In all, 73% of start-ups that had not yet been open for three years met their growth targets, while 71% of start-ups that had been open for at least three years met theirs. None of those differences is statistically significant.

Conversions and start-ups also differed in their student and school characteristics—in some cases markedly. Start-ups served lower percentages of English learners, Hispanic/Latino students, and students whose parents had not graduated from high school. They also had fewer fully credentialed teachers and more teachers with less than two years of experience. The table on page 11 provides the exact percentages.

figure 9 | **A significantly higher percentage of classroom-based charters met their 2005 API growth targets compared to nonclassroom-based schools**

Type of Charter School	Number of Schools	Number (and %) of Schools Without API Data	Number of Schools with API Data	Of Those with API Data, Percent that Met 2005 Growth Targets
Classroom-based	297	14 (5%)	283	76%
Nonclassroom-based	105	33 (31%)	72	64%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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The differences between conversions and start-ups give some perspective on the relationship between how and why a charter was founded and its performance. It may also say something about resource allocation and performance because start-ups generally spend more of their general purpose funds on facilities, while conversions generally use the facilities they occupied as regular public schools. Finally, it is interesting to look at the conversion/start-up breakdown because start-ups are a growing segment of the charter universe. In 1993 start-ups comprised 35% of all charters, but steady growth brought that up to 82% in 2004–05.

The distinction between classroom-based and nonclassroom-based charters relates to educational strategy. In a few cases, the difference between the two types is one of degree: some students in “nonclassroom-based” charters spend most

of their time in the classroom. In most cases, however, it is a fundamental difference of kind, with students receiving the large bulk of their instruction from their parents, online, or in an internship. Thus, the approach to instruction can be very different in classroom- and nonclassroom-based charters, making it worthwhile to look at them separately. In addition, it is important to note that the students served by the two types are often very different.

A higher percentage of conversion charters compared to start-ups met their growth targets in 2005

Altogether 80% of conversion charters met their growth targets, as compared to 71% of start-ups. (See Figure 8.) Some observers may think the lower percentage among start-ups is due to their needing time to settle into a new facility and establish processes and relationships among

Classroom-based charter schools were more likely to meet performance goals than nonclassroom-based charters

In 2005, 76% of classroom-based charters met their growth targets compared to the 64% of nonclassroom-based charters. (See Figure 9.) That difference is statistically significant. Note that data are missing for 31% of nonclassroom-based charters. Although that is a large portion of schools without data, it is a substantial improvement over the previous year, when 46% did not have data.

The set of nonclassroom-based charters with data also diverged considerably from classroom-based charters in their organization and approach. (See the box on page 13.) The majority of nonclassroom-based charters served students schooled at home. While most schools say their overall instruction is based on California’s academic standards, the approach to learning might not fit neatly

Nonclassroom-based charter schools offer a variety of approaches to educating California's K-12 students

There is no such thing as a “typical” nonclassroom-based charter school in California. The 72 nonclassroom-based charter schools with performance data included in this report vary significantly in location, size, configuration, curriculum, and student body. But by piecing together information from a variety of sources—including state data, an EdSource survey, the GreatSchools website, and other websites—a picture of these schools begins to emerge.

Most nonclassroom-based schools have some things in common

Many of the nonclassroom-based schools referred to in this report share commonalities. About half are in rural communities, most are kindergarten through 12th grade (K-12) or K-8 schools, and the majority of them serve fewer than 300 students.

The majority of these schools came into existence to support home schoolers or older students doing independent studies. As a result, parents play a more active role in educating their children. Some schools also rely at least partially on parents to provide enrichment classes for all students. Yet some parents come to the job with very little formal education. In a few schools, one in three parents had not graduated from high school. More typically at least 90% of the parents had a high school diploma.

Most nonclassroom-based charter schools have a principal who assigns a teacher to each student. The student, parent, and teacher then work out a program that fits the student's needs. The teacher is expected to provide support to the student, including answering questions, supplying direction when needed, reviewing student work, and meeting with the student on a regular basis. The schools generally either provide materials or funding to purchase them.

A handful of these schools rely solely on distance learning, but most offer some site-based classes, field trips, and other chances for community building. The majority of students are white, and the percentage of students new to the school tends to be high.

Some of these charters are relatively new, but others have been around for more than 10 years. The newest schools covered in this report were chartered in September 2003, the oldest in August 1993. More than half of the schools included here received their charter in one of the four years from 1999 through 2002.

But these commonalities mask significant differences.

School location, size, and configuration vary

Nonclassroom-based charter schools are located throughout the state in inner cities, rural communities, and the suburbs. Although small schools predominate, some nonclassroom-based charters are large. Schools also come in a variety of configurations.

- About one in six schools enrolls fewer than 100 students, and about one in eight has more than 1,000 students.
- In October 2004, the largest school had 3,562 students, while the smallest served just 35 pupils.

- About 40% of the schools are in a K-12 configuration, 20% in K-8, and 10% in 9-12. Only two schools were strictly elementary.
- No schools served grades 6-8 exclusively.

Learning philosophies differ dramatically

Within the limited universe of nonclassroom-based charter schools are substantial differences in the curriculum. Some schools offer specific approaches to learning, such as the Montessori method, community-based learning, or CORE Knowledge. Others offer a combination of approaches. Most assert that they emphasize California's academic standards. A few require community service.

How students spend their days is also very different. While some of these charter school students sit at home and do their work on computers, others are out in the world, primarily learning through internships and field trips. One school offered independent study with a variety of classes as well as three magnet programs: performing arts, air and space, and agricultural.

The on-site classes provided by the schools are also quite varied. A number of schools offer foreign language and visual/performing arts classes. A few schools provide science labs. One school had math and writing laboratories and literacy classes. Many offer enrichment courses, such as horseback riding, welding, or woodworking. One school offers teacher training for parents. In some schools, enrichment classes are limited and students are chosen based on a first-come, first-served basis or by lottery. Other schools provide two to four days of classes for all students. In many of the schools, high-school-age students are encouraged to take community college classes.

Students and parents choose this nontraditional approach for many reasons

The student population is predominantly white. The vast majority of these schools have fewer than 5% English learners, even though English learners make up about a quarter of California students. While 63% of regular public schools receive federal Title I funding for low-income students, only one in seven of the nonclassroom-based charter schools in this report do. This could be because the student population does not qualify for the funds or because the schools did not apply for the federal aid. The number of new students appears to be high, with about half of the students in the median school new at the beginning of the year—excluding the students in the entry grade.

The reasons students and parents choose a nonclassroom-based school are also quite varied. Parent comments on the GreatSchools website (www.greatschools.net), express a number of reasons, including:

- An attraction to the particular program offered by the charter school.
- Dissatisfaction with the quality of the program at the local public school.
- A belief that home schooling strengthens the family and its values.
- The notion that their children do not do well in traditional settings because they are particularly bright, easily bored, hyperactive, or need a slower pace.
- Displeasure with rude behavior and the lack of discipline in their local school.

Key Characteristics of Classroom- and Nonclassroom-based Charter Schools* in 2004–05

Median: shows the percentage for a “typical” school—one at the 50th percentile for a given characteristic. Equal numbers of schools have higher and lower percentages. The median is used because extreme values can skew an average, especially for small numbers of schools.

Range for middle half: shows the percentages for the schools at the 25th and 75th percentiles. It provides a sense of how schools within each group vary.

	Classroom-based Charters (283 included**)	Nonclassroom-based Charters (72 included‡)
Student Characteristics	Median Range for Middle Half	Median Range for Middle Half
English Learners	7% 1%–34%	0% 0%–3%
Hispanic/Latino	27% 11%–64%	13% 5%–20%
White	36% 4%–66%	67% 58%–82%
African American	5% 2%–14%	3% 1%–7%
Asian	2% 0%–5%	2% 0%–3%
Free/Reduced-priced Meals†	44% 23%–78%	27% 17%–43%
Parents Not High School Grads	7% 2%–27%	4% 1%–8%
One or More Parents a College Grad	22% 10%–34%	26% 18%–32%
Students New to School (excluding the students in the entry grade)	21% 11%–33%	52% 39%–66%
School Characteristics		
Enrollment	250 161–412	242 136–651
Teachers Not Fully Credentialed	15% 3%–39%	5% 0%–19%
Teachers with Less than Two Years of Experience	25% 12%–44%	14% 1%–23%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

EdSource 5/06

*INCLUDES ONLY SCHOOLS WITH 2005 GROWTH API DATA.

**FOR EACH VARIABLE, DATA MISSING FOR 0–1 SCHOOLS.

‡FOR EACH VARIABLE, DATA MISSING FOR 0–3 SCHOOLS.

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into the curriculum and testing regimen prescribed by the state. Thus, because this report uses API scores, comparisons between these two types of charters may not be “apples to apples.”

Not only do nonclassroom-based charters differ from their classroom-based counterparts in their operations and instructional methods, but they also have different student and school characteristics. For example, nonclassroom-based charters tended to have more experienced and credentialed paid staff, relatively large percentages of white students, and extremely low proportions of English learners compared to classroom-based charters, according to CDE data. The table on this page provides specific figures.

In addition, the table shows that nonclassroom-based charters had a high percentage of students in their first year at the school. (The lowest grade is excluded. For example, in a K–8 school, kindergarteners would not be counted.) This was evident the previous year as well. The influx of new students each year means that the measure of API growth is based on test scores from quite different groups of students in the Base and Growth years. This could mean that lower API growth scores are the result of:

- The change in student population. However, if the demographics of the two groups are substantially different—for example, if in the second year of an API cycle, the proportion of low-income students grows significantly—the school or its chartering agency can document the change and request that the second year’s API be invalidated. Only two charters did not receive a growth score in 2005 for that reason. But it is not clear whether all charter operators knew about or took advantage of this option.

- The effects of being new to a school or changes in instruction to meet the needs of the new students.
- The type of students attracted to nonclassroom-based schools. Perhaps students having trouble in conventional school settings use nonclassroom-based schools as a temporary transition between regular public schools or as a way to avoid the classroom setting and still pursue a diploma. Such differences in the type of students served, which are not readily measured and reported to the state, should be kept in mind when comparing the achievement of these schools to other charters and mainstream noncharters.

Cross-tabulating charter types gives a perspective beneath the surface

Dividing charters into four subtypes based on the intersection of the characteristics described above allows for more precise identification of factors that correlate with meeting API growth targets. Charters that looked more like traditional schools—classroom-based conversions—had the highest percentage of schools meeting growth targets, while nonclassroom-based start-ups had the least success. However, with the small numbers of schools involved, the seemingly large differences were not statistically significant.

Another way to look at charter performance is to consider the interaction of charter types (e.g., conversion and classroom-based) to see whether particular combinations are performing notably well or poorly.

Data that compare the performance of charter schools by category are likely to interest policymakers who want to foster the creation of successful charter schools and discourage the kinds with less merit. But policy decisions based just on data for these broad categories could overreach. For example, a higher percentage of conversion schools com-

pared to start-ups met their growth targets, but are the conversion schools relying mostly on classroom-based instruction while start-ups are mostly nonclassroom-based? Cross-tabulating the various categories makes it possible to see beneath the surface comparison to address this question.

In Figure 10, schools are first categorized as classroom- or nonclassroom-based, and then subdivided into conversions or start-ups. The table shows the percentage of each subcategory that met their growth targets in 2005. The number of schools in each group should be considered when comparing performance because generalizing from small groups may not be sound.

Although the differences in the percentages in the cross-tabulation below are not statistically significant, they indicate that nonclassroom-based charters pulled down the proportions of conversions and start-ups meeting growth targets. If the divisions were reordered, they would show that start-ups pulled down the proportion of classroom- and nonclassroom-based charters meeting their growth targets. The impact of these characteristics resulted in nonclassroom-based start-ups having the lowest percentage of schools meeting growth targets among

the four subtypes. Conversely, classroom-based conversions had the highest percentage.

Cross-tabulating charters by grades and subtype offers yet another look

Another interesting way to look at the data is to re-examine the performance of charter schools at the elementary, middle, and high school levels to see whether the effects of subtypes were at work. Using this more complex approach, nonclassroom-based start-ups had a smaller percentage of elementary and high schools that met their 2005 growth targets. On the other hand, classroom-based conversions that were also elementary schools were the most likely to meet their growth targets. However, because of the small number of schools, the differences would have had to be very large to be statistically significant.

The tables in Figure II on page I6 show the number of charters in the three grade spans in each subtype and how those subtypes performed, revealing that overall percentages for each grade span mask variations among subtypes.

The data presented in Figure II—though not statistically significant because of the small numbers of schools in each category—show that:

- Nonclassroom-based start-ups comprised a sizable portion of charter high schools (34 of 116 or 29%), and these schools had a relatively low percentage

figure 10

2005 Growth API results for charter schools by subtype show that classroom-based conversions were the most likely to meet their growth targets, but the results were not statistically significant

Classroom-based or Nonclassroom-based	Conversion or Start-up	Number of Schools with 2005 Growth API Data	Percent of Schools with API Growth Data that Met Growth Targets
Classroom-based	Conversion	70	81%
	Start-up	213	74%
Nonclassroom-based	Conversion	10	70%
	Start-up	62	63%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

EdSource 5/06

that met their growth targets. Similarly, nonclassroom-based start-ups, though not as prevalent at the elementary level, pulled down the proportion of elementary charters meeting growth targets.

- High school start-ups pulled down the proportion of start-ups meeting growth targets.
- Classroom-based conversions that were elementary schools had the highest percentage of schools meeting their growth targets.
- Among middle schools, classroom-based conversions and start-ups performed similarly, and the nearly complete absence of nonclassroom-based schools is also notable. (The one nonclassroom-based middle school is a K–12 school that primarily has middle-grade students.)

An EdSource survey of charters helps flesh out the performance picture

Based on an EdSource survey of charter schools in spring 2005 and 2005 API growth target results for those schools:

- It appears that the more extra instructional minutes a charter school requires, the more likely that school will meet its growth target.
- Charter schools that strike a balance between autonomy and oversight from their chartering agency are more likely to meet their growth targets.

However, these correlations do not imply that extra time or a balance between autonomy and oversight are in and of themselves enough to cause improved student performance.

In spring 2004–05—the same year from which performance results are drawn for this report—EdSource surveyed California’s 544 charter schools that, according to CDE records, were either open or opening soon. With much effort, EdSource was able to secure responses from 463 schools.

However, some schools could provide only partial information and/or rough estimates, and others did not have API growth data. In the end, EdSource

figure 11 If a school was a nonclassroom-based start-up, a high school, or both, it was less likely to meet its 2005 growth targets; but the results are not statistically significant

Number of Charter Elementary, Middle, and High Schools in Each Subtype

Classroom-based or Nonclassroom-based	Conversion or Start-up	Elementary	Middle	High	Number of Schools with 2005 Growth API Data
Classroom-based	Conversion	54	11	5	70
	Start-up	110	30	73	213
Nonclassroom-based	Conversion	6	0	4	10
	Start-up	27	1	34	62
Total		197	42	116	355

Percentage of Charter Elementary, Middle, and High Schools in Each Subtype Meeting Growth Targets

Classroom-based or Nonclassroom-based	Conversion or Start-up	Percent Meeting API Growth Targets			
		Elementary	Middle	High	Overall
Classroom-based	Conversion	85%	73%	60%	81%
	Start-up	78%	77%	66%	74%
Nonclassroom-based	Conversion	67%	0%	75%	70%
	Start-up	67%	100%	59%	63%
Overall % Meeting API Growth Targets		78%	76%	64%	73%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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obtained both survey and API growth data on 318 charters.

Two pairs of questions from the survey yielded information that was interesting to examine for relationships with API performance.

Extra instructional time may help schools reach API growth targets

One pair of questions asked whether the school required their students to receive more instructional time beyond what the state requires for schools to qualify for “longer day and year” funding, and how much extra time. (The amount of “state-required” time, which varies according to four grade spans, was provided for refer-

A sample calculation explains how EdSource determined charter schools’ extra instructional time

If a K–3 charter requires its students to attend school for 55,000 minutes per year, its kindergarten students will receive 19,000 minutes of instruction beyond the state-required 36,000 minutes, or an extra 53%. The students in grades 1–3 will receive 4,600 minutes beyond the 50,400 state-required minutes, or an extra 9%. Schoolwide, when all grades’ percentages are averaged together, this sample charter requires students to receive 20% more instructional time per year $[(53\% + 9\% + 9\% + 9\%) / 4 = 20\%]$.

ence.) Those answers were converted to percentages for each grade and then averaged across grades to derive a schoolwide percentage. (A sample calculation is provided in the sidebar on page I6.) Schools, based on the percentages, were then placed into three categories: 1) zero extra time or less than the “state-required” amount; 2) 1%–13% extra time; and 3) 14% or more extra time. EdSource chose 13% as the cutoff because roughly one half of schools requiring extra time fell below and above that point. Also, the number of minutes represented by that percentage seemed substantive but not, for example, more than one extra class period at a typical high school.

Assuming students spend their extra instructional time well with high-quality teachers, more instructional minutes could contribute to improved student achievement. Figure 12 shows such an expected correlation between extra instructional time and meeting API growth targets. However, these findings are not statistically significant. And further investigation is necessary to determine the extent of the impact because many other factors—such as curriculum, teaching quality, and demographics of students in those schools—have not been taken into account.

A balance of autonomy and support from the chartering agency may help charters meet growth targets

Another pair of questions from the survey provided interesting information on the relationship between the charter school and its charter-granting agency and the school’s collective bargaining arrangement with its teachers, if any. Those data were combined with information from the CDE on whether the school received its funds through its chartering agency (“locally funded”) or directly from the state (“direct-funded”). Together, these data may indicate the

figure 12 The more extra instructional time a charter school required, the more likely that school met its 2005 growth targets, but these results are not statistically significant

Percent of Extra Instructional Time	Number (and %) of Schools	% Meeting API Growth Targets	Contextual Data
0% (or less than “state-required” time)	157 (52%)	69%	61% Classroom-based 24% Conversion 53% Elementary 38% High Schools
1%–13%*	78 (26%)	73%	95% Classroom-based 28% Conversion 47% Elementary 38% High Schools
14+%	68 (22%)	76%	100% Classroom-based 12% Conversion 72% Elementary 12% High Schools

*13% extra time translates to about 26 extra minutes per day for kindergarten, 36 minutes for grades 1–3, 39 minutes for grades 4–8, and 46 minutes for high school.

DATA: EdSource SURVEY, SPRING 2005
CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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degree to which charter school operators were able to make their own decisions—or the “autonomy” with which they ran their schools. Of course, they are not a perfect proxy for the level of autonomy; but it is probably safe to assume that the operators of schools at the ends of the spectrum likely experienced materially different levels of support and oversight from external entities.

Schools were placed in three categories based on answers to those questions:

- **“Low-autonomy”:** These charters reported receiving “several important services” from their chartering agency, had collective bargaining arrangements that aligned completely or almost completely with that of the charter-granting agency, and were locally funded.
- **“High-autonomy”:** These schools received from their chartering agencies

“oversight only, no direct services or support.” In addition, the teachers in these schools had no collective bargaining agreement or had an agreement that did not align at all with that of the chartering agency. Finally, these schools were direct-funded.

- **“Mid-autonomy”:** This category served as the large middle ground. EdSource placed schools that did not fit into either of the above categories into this “mid” classification. Schools in this category could have had indicators of both low and high autonomy, such as receiving several important services from their chartering agency but getting funding directly from the state. Or they could have a set of “middle” values, such as receiving some services from their chartering agency or having a collective bargaining agreement that was different from the one their chartering agency had with its teachers.

Figure 13 shows the percentage of schools in each group that met their API growth targets. While the low-autonomy group narrowly outperformed high-autonomy schools, the more substantial difference was seen between both of those groups and the “mid-autonomy” schools. As with extra instructional time, however, correlation should not be mistaken for causation—especially because many factors are not accounted for here.

But the findings do provide interesting fodder in the debate between charter advocates—who generally push for more autonomy for schools—and the policymakers and educators who want more control over charters. Although these findings are not statistically significant, they support the need for further research to determine if a “happy

medium” between autonomy and oversight works best.

Charter school performance is similar in 2004 and 2005

Charter school versus noncharter performance in 2005—overall and by type—was similar to that of 2004 in terms of which group of schools had a higher percentage that met their API growth targets. Charter high schools were the exception, achieving a lower percentage than their noncharter counterparts in 2005. Narrowing the comparison to just those schools with API data in both years yields similar results, but differences tend to widen.

The charter school universe in California is dynamic, with annual increases in the number of charters and changes within the schools themselves. This makes it a challenge to compare charters’ performance to noncharter schools. It

also limits what can be said about their progress, as a group, over time. On the one hand, “simple” comparisons of how groups of charter schools did from one year to the next involve comparing different sets of schools. On the other hand, limiting comparisons to a consistent group of schools that had data in both years leaves some out.

Whichever type of comparison is used, tracking charter school performance over time makes sense. Charter schools are, after all, a relatively new and growing educational reform effort. The extent to which they consistently succeed or fail at improving student achievement is one measure of how well the effort is working. This section compares charter performance in the 2005 and 2004 Growth APIs. (The cross-tabulations in Figure 10 are different from those that EdSource created last year with 2004 data so those cross-tabulations are not compared.)

Initially, EdSource compared the results of 2005 to those of the previous year without regard to whether the groups of schools were the same in both years. Most comparisons were similar in terms of which group of schools had a higher percentage that met their API growth targets. In both years, charter schools overall had higher percentages than non-charters; elementary and middle school charters beat their noncharter counterparts; conversions outdid start-ups; and classroom-based charters beat nonclassroom-based charters. The only exception was at the high school level, where in 2004 charters had a higher percentage meeting growth targets as compared to their noncharter counterparts, which was not the case in 2005.

The margins were different in the two years, however. For example, in the overall charters-versus-noncharters comparison, a 12-percentage point difference in 2004 shrank to a six-point difference in 2005. Differences at the elementary and middle

figure 13 Charters that struck a balance between autonomy and oversight from their chartering agency were more likely to meet their 2005 growth targets, though other factors could have played a role

Level of Autonomy	Number in Survey	Number in Survey with Growth API Data	% Meeting API Growth Targets	Contextual Data
Low	84	61	67%	74% Classroom-based 44% Conversion 0% Direct-funded* 59% Elementary 33% High Schools
High	71	43	65%	86% Classroom-based 5% Conversion 100% Direct-funded* 53% Elementary 35% High Schools
Mid	297	214	75%	79% Classroom-based 19% Conversion 64% Direct-funded 56% Elementary 32% High Schools

*Schools were categorized in part by their funding model. Therefore, the “low autonomy” category contains only locally funded charter schools, and the “high autonomy” category contains only direct-funded charters.

DATA: EdSource Survey, Spring 2005
CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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figure 14

A simple comparison shows that a higher percentage of charter schools made their growth targets in both 2004 and 2005 than noncharters, except in the case of charter high schools in 2005

		2004	2005
		% Meeting API Growth Targets	% Meeting API Growth Targets
Overall	Noncharter	48%	67%
	Charter	60%	73%
Elementary	Noncharter	46%	68%
	Charter	57%	78%
Middle	Noncharter	54%	66%
	Charter	81%	76%
High	Noncharter	49%	67%
	Charter	58%	64%
Conversion v. Start-up	Conversion	61%	80%
	Start-up	59%	71%
Classroom- v. Nonclassroom-based	Classroom-based	64%	76%
	Nonclassroom-based	44%	64%

DATA: CALIFORNIA DEPARTMENT OF EDUCATION (CDE)

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school levels also decreased from 2004 to 2005. For high schools, a nine-point advantage for charters in 2004 switched direction such that noncharters had a three-point lead in 2005. The conversion/start-up and classroom-/nonclassroom-based comparisons, while not changing directions, were also noticeably different. Figure I4 shows the specific comparisons.

When comparisons are limited to schools that were open and had API data in both the 2003/2004 and 2004/2005 cycles, substantial numbers of schools fall out and differences tend to widen slightly. For example, in a simple comparison of charters and noncharters, there was a 12-point differential (60% versus 48%) in the 2004 Growth API and a six-point gap (73% and 67%) in 2005. However, when the 247 charters that were open and had data in both cycles are compared to the 7,070

noncharters that were open and had data in both cycles, the differences grow to 14 points and seven points, respectively.

Charter school performance is a topic of continuing interest

California schools and educators are under increasing pressure to see that students are gaining the skills and knowledge outlined in the state's academic content standards. Many in the state, including some policymakers, have invested great hope in the charter school approach. Their goal is to allow schools to concentrate on students' educational outcomes by freeing them from many regulations related to school operations. Using the chartering process as a way to reinvent failing schools under NCLB is one example of this optimism. Another is the growth of charter high schools in response to concerns that the traditional, large, comprehensive high school

is not meeting the needs of many of today's students.

When reports of academic performance show that charters are doing well compared to other public schools, some charter advocates take that as validation of their efforts and use it as "evidence" to bolster their cause. They may be inclined to seize on the fact that higher percentages of charter schools than regular public schools met their API growth targets for two years in a row. However, looking at those simple comparisons with a magnifying glass allows one to see variations within the charter community—with some types and grade spans performing quite well, and others not nearly as well. More importantly, a simple comparison of percentages does not take into account differences in student demographics and resources available to schools, and of course cannot provide information about the nearly one in eight charters without API data. If those differences were controlled for and if all charters reported results, the performance comparisons could look quite different.

Furthermore, meeting growth targets is only one type of performance measure. Charters as a whole, and groups of charters, may fare differently under different measures. For example, an upcoming EdSource report will summarize charters' performance on the statewide and similar schools rankings released this spring. (Watch the EdSource website for more information.)

This report does not provide definitive evidence about the success of charter schools as a reform model in California. But it does suggest that advocates' hopes regarding charters' positive impact on student achievement may have some merit. Further research on charter school performance—perhaps using more powerful analytical tools—could help Californians understand which factors are contributing most to the success of this important reform effort. ■■

● | To Learn More

Other research

EdSource's May 2005 report—*How Are California's Charter Schools Performing?*—includes brief summaries of other charter performance research and may be downloaded for free. See: www.edsource.org/pub_abs_charters05.cfm

The wording of the questions in EdSource's survey of charter schools (spring 2005) that are referred to in this report can be found at: www.edsource.org/pub_abs_charterperf06.cfm

To read SRI International's March 2006 evaluation of five charter schools that are part of the nationwide Knowledge is Power Program (KIPP) network, see www.sri.com/policy/cep/choice/KIPP.htm. One of the central features of KIPP schools is the provision that they provide substantially more instructional time than the state requires.

For more information on the effect of subgroups on school accountability results, go to www.cde.ca.gov/ta/ac/ap/researchreports.asp and look under "Statistical Properties Reports—No Child Left Behind." Stanford University Professor David Rogosa's analyses are posted there.

Information on charter school laws and policies

See the charter school section of EdSource Online for an overview, relevant data, and a list of EdSource publications related to charter schools: www.edsource.org/edu_chart.cfm

The California Department of Education (CDE) also provides a great deal of information on its website: www.cde.ca.gov/sp/cs/re/

The CDE's rules on classifying schools as elementary, middle, or high for the Academic Performance Index (API) can be found at the following website: www.cde.ca.gov/ta/ac/ap/documents/schltypedef05.pdf

Data about individual charter schools in California

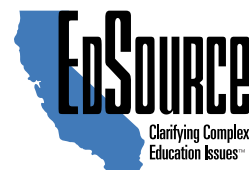
The Ed-Data Partnership website—www.ed-data.k12.ca.us—provides a wealth of data about every charter school in California, including student background, staffing information, and summary Adequate Yearly Progress and Academic Performance Index reports. Data as far back as 1992–93 are available. In addition, a "Compare Schools" feature on Ed-Data allows you to develop customized reports comparing schools you select. You can also use this feature to create lists of California charter schools you would like to see. For example, you can request the 20 charter high schools with the highest enrollments, or all of the elementary charters that have 100% fully credentialed teachers.

The GreatSchools website—www.greatschools.net—provides free profiles of all California schools with performance, student, and teacher data. For a small membership fee, the site also makes available comments from parents and principals about the schools.

Charter school organizations

See the California Charter Schools Association's website: www.charterassociation.org

See the Charter Schools Development Center's website: www.cacharterschools.org



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The background of the page features a light blue and white graphic. It consists of several large, stylized upward-pointing arrows of varying sizes and orientations, creating a sense of growth and progress. To the right of the text, there is a vertical scale or ruler-like element with numerical markings at 400, 500, 700, and 800. The overall aesthetic is clean and professional, typical of an educational or organizational report.

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