A STEP UP

How Charter Schools Provide Higher Levels of California Public University Access

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EXECUTIVE SUMMARY 2
A STEP UP: HOW CHARTER SCHOOLS PROVIDE HIGHER LEVELS OF CALIFORNIA PUBLIC UNIVERSITY ACCESS 7
APPENDIX 1
METHOD AND LIMITATIONS 26
APPENDIX 2
CALIFORNIA PUBLIC HIGHER EDUCATION 31
APPENDIX 3
CORRELATION ANALYSIS 33
APPENDIX 4
TESTING HYPOTHESES FOR POSITIVE CHARTER RESULTS 35
APPENDIX 5
ACT, SAT AND AP MEASURES 40
Executive Summary

The California Charter Schools Association (CCSA) has assembled a first-of-its kind dataset combining data from the University of California (UC) system, the Cal State University (CSU) system, and all California public high schools, which demonstrates that charter schools are helping increase access to college for thousands of historically disadvantaged youth in California, including minority, low income and first-generation college-going students.

1. By creating a college-going culture, charter schools are providing all students, regardless of background, access to higher education in California.

2. Charter schools are helping students achieve entry into higher levels of college education than they would have had they attended traditional public high schools.

3. Charter schools are closing the college preparation gap for historically disadvantaged student groups while raising the bar for all students.
By Creating a College-Going Culture, Charter Schools are Providing All Students, Regardless of Background, Access to Higher Education In California.

Charter students apply to UCs at rates 50% higher than at traditional public schools (TPS)

Charter School Students 35%

Traditional School Students 23%

Charter schools are closing the gap of higher education access in California by:

Creating a culture of college-going:
African-American and Latino students in charters are almost twice as likely to apply to UCs as their traditional public school (TPS) peers. (35% vs. 19%)

Expanding access for at-risk student populations:
• More charter UC applicants are low income (69% vs. 59% of TPS applicants)
• More charter UC applicants are first-generation college-going (60% vs. 47%)
• Among schools serving a majority of low-income students, charter schools have 21% of students accepted to UCs: higher than traditional public schools serving a majority low income population (where only 11% of graduates are accepted to UCs) and higher even than charters serving a non-majority low-income population (where 18% of graduates are accepted to UCs).

Helping Increase Access for Historically Disadvantaged Youth:
Statewide, African-American and Latino youth are only about half as likely to be accepted to a UC as their population size in California would suggest. Charters help these historically disadvantaged students get admitted to UCs at nearly twice the rate of their traditional public school peers.

Of all African-American and Latino charter school graduates, 19% are accepted to UCs, nearly twice that of traditional public school students (11%).
Charter Schools are Helping Students Achieve Entry Into Higher Levels of College Education Than They Would Have Had They Attended Traditional Public High Schools.

Charter schools are more likely to send students to UCs and CSUs.

- **Charter Schools**
  - All Graduates: 16%
  - African-American/Latino Graduates: 15%

- **Traditional Schools**
  - All Graduates: 14%
  - African-American/Latino Graduates: 13%

More charter students who would have otherwise enrolled in CSUs are gaining entry into UCs. Similarly, more students who would have otherwise enrolled in community college are gaining entry into CSUs.

When we examine UC enrollment in particular, we see that the average charter school sends 7% of its graduates to a UC (vs. 5% for TPS). Given that charters encourage more students to apply and be accepted to the UCs, we hypothesize that the charter-TPS gap is made up of students who would have otherwise likely gone to CSUs.

The average charter sends 9% of its graduates to CSUs, which is the same as TPS. But given that we find above that more charter students are going to UCs, we conclude that charters are encouraging an additional group of students to attend CSUs who would have otherwise gone to community college.

This theory is corroborated by the statistic that charter students attending CSUs have slightly lower GPAs on average than TPS students (2.72 vs. 2.91).
Charter Schools are Closing the College Preparation Gap for Historically Disadvantaged Student Groups While Raising the Bar for All Students.

Charter high schools are providing a greater proportion of their students with college access through higher A-G subject requirement completion rates than their TPS peers.

Charter School Students 37%

Traditional School Students 24%

Over the last six years, charters have increased the percent of high school graduates who have completed all college preparatory coursework at a pace four times’ that of TPS.

Historically disadvantaged students are substantially more likely to complete an A-G curriculum if they attend charter schools.

Charters provide college access to students who might have missed that opportunity had they attended Traditional public schools.

- Charters provide a disproportionate share of all African-American and Latino high school graduates who have completed college prep coursework (Charters graduate 9% of all African-American and Latinos, but produce 12% of all African-American and Latino grads who have completed A-G coursework).
- All students, regardless of ethnicity, achieve higher A-G completion rates in charters than in TPS.

Charters are closing the college preparation gap for historically disadvantaged student groups while raising the bar for all students. Historically disadvantaged students in charters have achieved outsized gains over the past 6 years (2008 to 2013).

College access for some vs. for all

- Charters are much more likely to be among the subset of schools that have nearly all (95% or more) of their graduates completing A-G coursework.
  (22% of charters are in this category vs. only 1% of TPS)
- Charters compose only 17% of public schools with a 12th grade but make up 81% of schools where nearly all graduates complete A-G requirements.
These Impressive Findings Support Three Policy Recommendations:

1. Reinforce the need for access to A-G completion for all historically disadvantaged students as one of the starting points to ensure educational equity in college-going outcomes.

2. Improve data collection and availability of post-secondary data to facilitate additional research into what is working for charter schools and how to replicate their students’ college and career readiness.

3. Open more high-quality, autonomous charters as a promising way to give our students a step up into higher levels of post-secondary education which will influence the trajectory of their lives.
Introducing Benito*:  
The Face of California Charter Schools’ College-Going Culture  
*Student’s name changed to protect confidentiality

As a young child, Benito’s family struggled to provide for him and his siblings. The family suffered severe financial hardships that made it difficult to provide the basic necessities of food and housing to survive. As he grew older, many of his peers started getting into trouble and he saw many of them join gangs. The community he lived in has 52 rival gangs identified by the local police and is one of the lowest socio-economic areas and highest reported crime areas in San Diego. The problems in the streets poured into the schools in Benito’s neighborhood. While his parents feared for his future, they did not have the financial means to move the family away from the gangs and to better schools in the U.S. and ultimately had to return to Tijuana, Mexico to meet their basic needs. But Benito took a different path: as a seventh grader, grade levels behind in reading, writing, language development and math skills, he enrolled in Gompers Preparatory Academy (GPA). GPA is an autonomous conversion charter school in San Diego, CA. Here he was introduced to a college-preparatory culture. “College was not the focus in my house because of our hardships but my parents had a dream for a better life for me and my school helped me believe that it could change my future.” says Benito. It was this belief that caused him to commute from Tijuana starting at 4:00 a.m. every morning to attend school at Gompers Preparatory Academy (GPA) during high school. As a U.S citizen, he would wait in line for two hours to cross the border, board a trolley that would drop him off a mile from the school where he would walk the remainder of the way to access what he and his family felt was a life changing educational opportunity.

Benito says he relied heavily on the support of his charter school’s college readiness curriculum and the culture that insisted he WOULD go to college. At Gompers Preparatory Academy, Benito was enrolled in an “A-G Curriculum,” which is the specific coursework students need to complete in order to be eligible for UC and Cal State schools. Benito started taking the A-G curriculum in the 8th grade with Algebra 1 and Spanish for Spanish Speakers 1. He was given
numerous intervention supports after school, during school vacations and on Saturdays. He was given additional classes in math and English support and he was even allowed to repeat courses and receive additional intervention in summer school sessions if he needed. The whole system was designed to keep him on track to complete the A-G courses to ensure he was not denied access to all CSU and UC applications. The school’s graduation proficiency in A-G requirements is one demonstration that students have the rigorous courses and skill set to be successful in college.

Vince Riveroll, the Director of Gompers Preparatory Academy, explains that all students at Gompers are required to complete the A-G requirements in order to graduate – this is just one component of a holistic college preparatory program. “It is not that students who are academically and behaviorally behind when they come to us can’t successfully participate in a college preparatory curriculum and we should not deny them access to these courses. But we had to change the way we viewed teaching pedagogy, school wide academic culture and create systemic supports to ensure all students could have access and then complete the A-G course sequence successfully. As students struggled with the curriculum, new interventions to meet their needs were created.”

Benito and other Gompers students were also introduced to a college preparatory culture in a weekly “college class” that simulates a large university lecture hall. Director Riveroll teaches the entire senior class on Mondays, with an emphasis on their development in becoming college-ready readers, writers, independent thinkers, and better time managers. Infused into the curriculum of the school, students are educated on character education, college-going skills, and other critical college success skills and habits such as public-speaking, critical thinking, note-taking, and how to study and be academically resilient. Through a wide variety of college-focused strategies, robust academics and a deep-seated college-going culture, Director Riveroll notes that, “we have stopped the ‘pipeline to prison’ that once existed for students who entered this school and have opened a ‘highway to college’ for all students.” All of last year’s seniors graduated and were accepted to a post-secondary school, with 82% of those eligible admitted to a four-year institution. The number of students applying, accepted and choosing to attend four-year schools since it began graduating its first senior class in 2012 has increased each year. Notes Director Riveroll, before converting to charter school status, the 56-year old Gompers campus had never hosted a senior class with graduation and college acceptance rates anywhere near this level.

If you ask Benito if having access to a high quality college preparatory culture and curriculum made a difference for him and now his younger siblings that are following in his footsteps, he will tell you it is has been life changing. “I view the world and what is possible for my future differently than I did before a college path was laid out for me in middle school and into high school. My high school believed in me and supported me to get this far.” Benito graduated from GPA in 2015 and received a $40,000 Chancellor’s scholarship from the University of California, San Diego where he is currently studying Engineering and Math. “I plan to use what I learn to help me and my family to have a better life.”
Charter Schools are Increasing Access to Higher Education for Historically Disadvantaged Youth

As Benito’s story shows, something special is happening in California’s charter schools. The California Charter Schools Association (CCSA) has assembled a first-of-its-kind dataset combining data from the University of California (UC) system, the Cal State University (CSU) system, and all California public high schools that demonstrates that students who attend charters are accessing a life path toward a more fulfilling and economically promising future.

The dataset includes multiple years of information that is related in theory but rarely linked in practice: A-G completion (i.e. high school course-taking patterns), UC application and acceptance rates, public university enrollments rates, and CSU performance. Please see Appendix One for a more complete description of the dataset and associated analyses.

The data throughout this report demonstrate that charter schools are helping increase access to college for thousands of historically disadvantaged youth in California, including minority, low income and first-generation college-going students. This is particularly crucial given the chronic opportunity gap that we see facing these student groups. Statewide, African-American and Latino youth are only about half as likely to be accepted to a UC school as their population size in California would suggest.
California’s system of public higher education includes three entities: the California Community Colleges (CCCs), the California State University (CSU) system, and the University of California (UC) system. The total cost of yearly attendance for students receiving financial aid across all three systems is similar, ranging from $9,700 to $12,500. Despite the similar cost, each system differs widely in terms of size, mission, and selectivity (see Appendix 2 for more details). Also, the likelihood that students achieve the stated mission of that system (whether it is to transfer from a CCC to a CSU/UC or graduate with a 4-year degree) varies dramatically across the 3 systems. Within six years of entering a CCC, only 48% of students (1) earn an associate degree or credit certificate, (2) transfer, or (3) complete 60 transferable units with a grade point average of 2.0 or better. Similarly, the CSU has a six-year graduation rate of 53% and a four-year rate of only 18%. The UC system has by far the best student outcomes: 82% six-year and 62% four-year graduation rates. While the three systems play different roles, they also do so with varying levels of success. This is why it is so crucial to focus on the acceptance and enrollment rates of historically disadvantaged and first-generation college-going students into the UC system.

The UC system contains some of the world’s top universities: six campuses are among the top 50 U.S. News and World Report rankings, and three are in the top fifteen Academic Ranking of World Universities. Institutional Research and Academic Planning at University of California, Office of the President, generously provided application, acceptance, and enrollment data.1 In California, African-American and Latino youth make up nearly two thirds of the state’s K-12 student population, yet represented only one third of the UC freshman admissions in 2013.ii African-American and Latino students are nearly half as likely to be accepted to a UC as their population size would suggest. This translates into millions of African-American and Latino graduates for whom greater earning potential, access to high quality jobs, and future opportunities are severely limited or eliminated.

African-Americans & Latinos Historically Under-represented in UC Admissions

<table>
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<tr>
<th>Year</th>
<th>UC Admissions</th>
<th>Population</th>
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<tbody>
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<td>00</td>
<td>59%</td>
<td>50%</td>
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African-American & Latino Charter Students More Likely to Apply to UC

<table>
<thead>
<tr>
<th>Type</th>
<th>Rate</th>
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<tbody>
<tr>
<td>Charter</td>
<td>35%</td>
</tr>
<tr>
<td>Traditional</td>
<td>19%</td>
</tr>
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University of California, Office of the President, 2013

Population data from U.S. Census Bureau Summary File, 2011.
UC Admissions Data: UC Office of the President, 2013
While significant work remains to close this gap, California’s charter schools are starting to move the needle for African-American and Latino students. **Charters help minority students get admitted to college at nearly twice the rate of their traditional public school peers.** Among all public high schools, charter students composed 6.5% of all African-American and Latino graduates in 2013. In contrast, 11% of all African-American and Latino public school students admitted to the UC system are charter school students. Although charter students represent a small proportion of the African-American and Latino public school population in California, those students represent a disproportionately large percentage of students being accepted to the UCs.

**Charters Provide Impressive Share of African-American & Latino UC Admits**

<table>
<thead>
<tr>
<th>Charter Graduates</th>
<th>6.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charter Grads Admitted to UC</td>
<td>11%</td>
</tr>
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</table>

_Minority charter students gain college admission at twice the rate of their traditional school peers._
Charter Schools are Creating a Culture of College-Going

Benito’s path demonstrates that a big part of the success in helping students access a four-year higher education begins with building a school culture where students can see the dream of college is within their reach, students are given the academic supports to be successful, and they are encouraged and supported to apply to four-year universities. GPA provides “Senior PM”–Offered 2-3 nights per week, where the school is open to the entire senior class as a study campus for three hours. Three “productivity zones” have been established, to allow students to study in the environment that best fits their workload and learning style. Teachers and support staff are present to provide expert assistance and college prep behavior guidance, as needed. Warm food is provided to ensure students basic needs are met as they study.

Innovative interventions such as these contribute to charter schools’ admission rates for historically disadvantaged students at nearly double the rates for traditional public schools and begin with impressive school-level application and acceptance rates for these subgroups.

Autonomy in charter schools allow them to develop and make quick adaptations to traditional college prep delivery models that are targeted toward the learners they are serving rather than targeted to traditional norms of which type of student has historically attended college. In more traditional high school course access practices, determining a college or non-college bound track can be

HOLISTIC COLLEGE PREPAREDATORY DELIVERY MODEL

Gompers Preparatory Academy

• Asset Based model of developing each student’s academic and personal strengths vs. determining their academic path based on what they can’t do or previous school performance.

• A strong belief by all teachers and staff that all students can attend a college after high school.

• Family service programs imbedded in the school to meet any social, emotional, and behavioral or attendance obstacles to academic performance.

• Providing adult mentors to students who struggle academically and/or behaviorally the most.

• Numerous parent education meetings regarding the college track start when families enter the school and continue to graduation.

• Creating a positive school culture that makes students want to attend school daily and rewards them for staying on a college track.

• Numerous and flexible intervention programs to increase a student’s time with rigorous curriculum.

• College success habits are intentionally taught and can be found threaded through every course and program in the school.

• A college-going culture in everything that is said and done in the school so the path of the student is clear and heavily supported.

• Access to A-G curriculum for all students including students in ELL and SPED programs. Increasing access to Advanced Placement courses. All students in the school take the SAT and or ACT to maintain access to college applications.

• Strong teacher and staff professional learning programs targeted to student needs based on academic data.

• A-G completion and completing one AP class is a graduation requirement.

• A celebratory school wide culture regarding academic success, college application submission and acceptances reinforce the path for younger students and families.
determined on behalf of a student as earlier as the age of 13 or 14. This typically happens in a meeting with a high school counselor and a new 9th grade student and in some school settings may occur without the student’s parent present. Gompers Preparatory Academy is just one of many charter college preparatory schools that are breaking the mold of how early determination of college access for some and declaring college access for all students is changing the delivery model of secondary schools and ultimately creating higher access to UC/CSU’s application, follow through on submission and closing the college admittance gap for historically disadvantaged students.

The college-going culture and mission that guides many charter schools translates to results: African-American and Latino charter students are almost twice as likely to apply to UCs as their traditional public school peers.

Specifically, nearly thirty-five percent of African-American and Latino students graduating from charters apply to UCs, compared to 19% of their peers in traditional schools.\textsuperscript{iv} Moreover, African-American and Latino charter students are accepted at twice the rate. These students not only apply at higher rates, but the quality of their applications also enables the UC system to accept them at nearly double the rate of traditional school graduates. The fact that charters are preparing these typically underserved students is even more impressive when considering that they are closing the opportunity gap such that African-American and Latino students alone are achieving acceptance rates virtually equal to that of all other student groups in charters.

\textit{African-American and Latino charter students are almost twice as likely to apply and be accepted to UCs.}
Charter Schools are Expanding Access for Other Historically Disadvantaged Student Populations:
Substantially more charter UC applicants are low-income and first-generation college-going

Charters also have impressive application rates with other historically disadvantaged students. Of the charter students that apply to the UC system, 69% are low-income and 60% are the first generation in their family to go to college. Another way to analyze how charter schools help low-income students is to focus on schools where half of all students qualify for the free or reduced price lunch program. These charter schools have 39% of their seniors apply to UC, which is over double the application rates of similar traditional schools. When we look at UC application rates from the perspective of these underserved students, the story of access arising from the charter sector grows even stronger.

By helping students who are African-American, Latino, low-income and first generation college-goers apply to and get accepted by the UC system, charter schools are closing the gap of higher education access in California.

Higher Application Rates for Historically Disadvantaged Students from Charters

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<th>Charter</th>
<th>Traditional</th>
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<tbody>
<tr>
<td>Low-Income</td>
<td>69%</td>
<td>59%</td>
</tr>
<tr>
<td>1st Generation</td>
<td>60%</td>
<td>47%</td>
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</table>

University of California, Office of the President, 2013
While many charter schools in California are driven by missions to increase access to college specifically for historically disadvantaged groups of students, all charter students across the board are accessing UCs at higher rates regardless of background. Data from the 2012-13 application process reveals that all students attending charter schools apply to UC schools at rates fifty percent higher than traditional schools in California. Even more impressive is that after charter students have been encouraged to apply, 20% of charter graduates are accepted into UC schools whereas only 14% of graduates are accepted from traditional high schools. Remarkably, charter schools serving majorities of low-income students have the highest acceptance rates of all: 21%! Charter schools deliver on the public school promise of preparing all students, regardless of background, for a more fulfilling and economically promising future.

Charter school students apply to UC schools at rates 50% higher than traditional school students.

<table>
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<th>UC ACCEPTANCE RATES</th>
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<tbody>
<tr>
<td>Mostly Low-Income?</td>
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<tr>
<td>No</td>
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<tr>
<td>Yes</td>
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</table>
So far, this report has explored the UC application and acceptance statistics for charter and traditional public high school students. Substantial and compelling data show charter schools are helping to close the gap of higher education access in California, as charter schools encourage and support more historically disadvantaged students to apply to and be accepted by the UC system. Aside from application and acceptance rates, enrollment data provide additional levels of insight into how high schools are helping students achieve postsecondary access. Overall, we see that charter students are more likely to enroll in UCs and CSUs – this is true for all students and for minority students as well.

Of all California high school graduates who go on to any type of college, approximately 80% enroll in the UC, CSU, or CCC systems. Our dataset includes enrollment data linking high school graduates to the UC and CSU systems. Compared to traditional public schools, we find that charter schools are more likely to send students to California’s four-year public universities. The pattern for African-American and Latino students closely mirrors the overall findings.

Looking at the UC and CSU data separately allows us to see in greater detail how charter schools benefit their students. The data suggest that charters give two distinct groups of students a “step up.” Specifically, the data imply that more charter students who would have otherwise enrolled in CSUs are gaining entry into UCs. Similarly, more students who would have otherwise enrolled in community colleges are gaining entry into CSUs. Each of these student groups is described in more detail below.
A Step Up to a UC

When we examine UC enrollment in isolation, we see that the average charter school sends 7% of its graduates to a UC. In contrast, the average traditional school sends only 5% of its graduates to a UC. That 2% difference between charter and traditional public schools exists for African-American and Latino students, as well.

What can we reasonably estimate about the students who compose this 2% gap? What can we surmise about where these students would have gone had they attended a traditional public school? When considering this question, it is important to remember the context of the findings highlighted in the previous section that charter students are more likely to apply to and be accepted by the UC system. Given those findings, we hypothesize that this 2% gap represents graduates who normally would not have even applied to a UC had they then attended a traditional school. Instead, these students probably would have attended a less selective post-graduate option. Since we know that 80% of all California graduates who go to college attend a public institution, the most likely alternative to a UC for these students is that they would have enrolled in a CSU.

A Step Up to a CSU

It might seem that the CSU story is one of equivalence: charter and traditional schools each get 9% of their graduates to enroll in a CSU. However, the previous section just proposed that the additional 2% of students who charters help enroll in a UC probably would have otherwise gone to a CSU. If that were the only group of students charter schools helped, then we would expect charters to enroll 2% fewer students in the CSU system. This is not the case, which suggests that charters actually get approximately 2% more graduates into a CSU than would otherwise be expected.
Added CSU Enrollment | Expected CSU Enrollment
---|---
Charter | 7% | 2%
Traditional | 9%

University of California, Office of the President, 2013

What can we reasonably guess about the students who compose this other 2% gap? Anecdotes as well as findings in the next section provide evidence that these are graduates who would not have met the requirements to enroll in a CSU had they not benefitted from a robust charter high school experience. In a traditional public high school, these students were likely on a path towards a community college, but their charter schools encouraged them to attempt and achieve one step higher. In other words, we hypothesize that charter schools are getting 2% of their graduates to attend a CSU who probably would not have enrolled in a four-year college at all had they attended a traditional public high school.

One additional data point that substantiates this hypothesis is the initial grade point average for college students who matriculated from charter versus traditional public schools in the CSU. We see that college students from charters on average have a slightly lower grade point average once in college than do students matriculating from traditional public high schools (2.7 vs 2.9, respectively). This provides additional evidence that charter schools are helping students access a four-year university who might otherwise have gone to a community college.

Additional research into the outcomes for charter and traditional public school students is needed to explore their continued success and matriculation through the entire four-year program while at a CSU or UC. But as highlighted at the beginning of this report, students who enter a community college are far less likely to successfully graduate or matriculate from that community college than those attending a CSU or UC. Thus, just getting the student in the door is an important step in the right direction to supporting students’ long-term success.

In sum, this section of the report finds that charter schools send higher percentages of students to California’s public four-year universities than traditional schools. We hypothesize that these results reflect two steps up: students who may have otherwise attended community college now attend a CSU, and students who may have attended CSU now attend a UC. The next section investigates a key prerequisite to college access: A-G completion.
This report started from the perspective of students applying to, being accepted by, and enrolling in higher education systems in California. But a critical precursor to that college access, as evidenced by Benito’s story at the beginning of this report, is the college-preparatory coursework students take in high school that prepares them to apply to a CSU or UC school. For acceptance to both UCs and CSUs, students must complete a set of coursework covering seven discipline areas called the A-G subject requirements. These courses must be approved by the universities as being academically challenging and providing students with a breadth of knowledge and analytical thinking skills that demonstrate preparation for and indicate likely success in college.ix

While A-G requirements represent only a portion of the UC and CSU admission requirements, we can see through A-G completion rates that charter high schools are providing a greater proportion of their students access to college opportunities. In 2013, charter school graduates completed the A-G requirement at a rate of 37% compared to the traditional school completion rate of 24%. This difference is even more remarkable when noting the change over time. In 2008, charters and traditional schools had very similar rates, but over the last six years charters have improved their college readiness coursework completion rate at a pace four times that of traditional schools.
Charter schools also are making a difference in college preparation for low-income and minority students. **Historically disadvantaged students are substantially more likely to be prepared for college if they attend charter schools.** Specifically, students attending charter schools with over half of their students qualifying for free or reduced price lunch are more than twice as likely to complete the A-G requirements as students at low-income traditional schools. Additionally, 37% of African-American and Latino charter students complete A-G coursework, nearly two times the rate of their traditional school peers.

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**Chart Schools Provide College Access to Students Who Might Have Missed That Opportunity Had They Attended Traditional Public Schools**

Some have theorized that results like these must mean that charter schools are serving students who are not truly comparable to those in traditional public schools. While a later section addresses claims like those more thoroughly, it is helpful to point out here that charter and traditional high schools serve very similar demographics of students. Given the nearly identical rates of low income, English learner and minority students served by charter and traditional schools with A-G data available across the state, it seems implausible to explain away charter schools’ disproportionate college-going success (particularly with historically disadvantaged student groups) by asserting that charter schools simply serve a different group of students.

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**A-G Completion Rates Show Historically Disadvantaged Students Benefiting the Most at Charter Schools**

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<tr>
<th>Students at Low-Income Schools</th>
<th>Charter</th>
<th>Traditional</th>
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</thead>
<tbody>
<tr>
<td>All African-American &amp; Latino</td>
<td>46%</td>
<td>20%</td>
</tr>
</tbody>
</table>

California Department of Education, 2013

---

**Charter and Traditional High Schools Serve Very Similar Demographics**

<table>
<thead>
<tr>
<th>Free/Reduced Lunch</th>
<th>Charter</th>
<th>Traditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>All African-American &amp; Latino</td>
<td>56%</td>
<td>52%</td>
</tr>
</tbody>
</table>

California Department of Education, 2013

---

**Enrollment for High Schools with A-G data available:**

California Department of Education, 2013
We can also measure the disproportionate achievement of these minority subgroups in terms of numbers of students. In 2013, charters served 9% of all African-American and Latino graduates of California public schools, but produced 12% of the all African-American and Latino graduates who completed their A-G coursework. If charters served a larger share of public high school students, their impact on these historically disadvantaged communities would be even greater. Charters provide college access to students who might have missed that opportunity if they had attended their neighborhood traditional school.

Charters Provide Disproportionate Share of African-American & Latino A-G Completers

<table>
<thead>
<tr>
<th></th>
<th>Charter Graduates</th>
<th>Charter Grads Admitted to UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American &amp; Latino</td>
<td>9%</td>
<td>12%</td>
</tr>
</tbody>
</table>

California Department of Education, 2013

Charters Are Closing The College Preparation Gap For Historically Disadvantaged Student Groups While Raising The Bar For All Students.

Like all charter students, historically disadvantaged subgroups have experienced dramatic gains in completion rates for college-preparatory coursework over a six-year period. African-American charter students increased their A-G completion rate by 15% and Latino students have more than doubled their completion rate to 37% in this time. What is especially impressive is that these gains are effectively closing the A-G achievement gap. In traditional public schools, Asian and white students complete the A-G requirements at one-and-a-half times the rate of African-American and Latino students. Amazingly, charter schools actually have a higher A-G completion rate for African-American and Latino students than for White and Asian students. Charters simultaneously accomplish two goals: closing an important achievement gap and increasing achievement for all students.

Charters Close the A-G Completion Gap while Raising the Bar for All Students

<table>
<thead>
<tr>
<th></th>
<th>Charter</th>
<th>Traditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American &amp; Latino</td>
<td>37%</td>
<td>20%</td>
</tr>
<tr>
<td>White &amp; Asian</td>
<td>34%</td>
<td>30%</td>
</tr>
</tbody>
</table>

California Department of Education, 2013
The idea of “college access for all” is not equally prevalent in traditional and charter public schools throughout the state. While some districts have tried to extend equal access to A-G coursework to all their students, this has proven difficult to implement. The A-G course requirements have been a recent topic of discussion as districts across California have either changed or are considering setting the bar for high school graduation at this minimum requirement for UC and CSU admission. In 2005, Los Angeles Unified School District (LAUSD) established a requirement for students to pass college preparation courses that would make them eligible to enter UC and CSU campuses. Starting with the Class of 2017, students would be required to pass the courses with a “C” grade to get them college ready. But in 2015, the district learned that 22,000 members of the class of 2017 students would not graduate under these requirements and therefore decided to lower the bar. The LAUSD board unanimously decided to allow students to pass the A-G classes with a “D” grade.x

San Diego Unified is also seeing a large discrepancy in the number of students on track to complete the proposed graduation requirements and are considering strategies used in many charter schools, like extended school days and independent study courses.xi

Charter schools continue to lead the way in setting high standards for their students. In addition to their overall average A-G completion rates being higher than traditional schools, charters are much more likely to have nearly all (over 95%) of their graduates completing these college admission requirements. While only 1% of traditional public high schools reach this completion rate threshold, 22% of charters have nearly all their graduates complete the A-G curriculum. Another way to look at the same phenomenon: charters compose only 17% of all public schools with a 12th grade, but they comprise 81% of all schools that help nearly all their students complete the A-G course sequence. There is more work to be done in all of California’s public schools to increase the number of college-ready graduates, but charters are making great efforts to close achievement gaps and provide college access to all students statewide.
These compelling results provide further confirmation that the regional trends previously documented in other college readiness reports published by CCSA hold true statewide. In 2014, CCSA published reports that investigated college readiness in Los Angeles and Oakland. In both cities, charters help far higher proportions of students complete the A-G requirements than traditional schools serving similar demographics. The Los Angeles report highlights Vaughn Next Century Learning Center, the first traditional school in the country to convert to a charter. Suzanne Llamas is a Vaughn teacher, administrator, parent, and grandparent who eloquently captures the rationale for and impact of their charter conversion:

“We converted to a charter because we heard too many painful stories of our kids not graduating from high school, let alone going on to college. I know we are making it happen for our families. I recently saw an old and dented van in front of our school. Pasted on the back window was a brand new decal that read, “Proud CSU Dominguez Hills Dad.” We did not see images like this 20 years ago. We do now!”

In sum, we see that charter high schools are preparing more of their students for college success and are providing access for students who might have missed that opportunity had they attended a traditional public school. We see that charter schools are closing the college preparation gap for historically disadvantaged students while at the same time raising the bar for all students. College access for all instead of college access for some is the trend at many charter schools throughout the state, as evidenced by the impressive application, acceptance, enrollment, and college preparation curriculum charter students receive.
Benito’s story shows that something special is happening in California’s charter schools. This report demonstrates that students who attend charters are accessing a life path toward a more fulfilling and economically promising future. College readiness is one of the most important goals for our public school students. Readiness starts with access to the college path including the A-G curriculum. California charter schools have higher success getting their students to complete the A-G courses required for admission to state public universities. Something different is happening in California charter schools, which is preparing students like Benito, who were more likely to drop out of school and join a gang than to complete the A-G curriculum, apply, be accepted to, and attend a UC school after high school.

Charters also help greater proportions of their students to enroll in the UC and CSU systems. Further research of the delivery models of California’s charter college preparatory schools is needed to create wider implementation of these programs across all California public schools. Models that are continuing to close the opportunity and college going gap for all of our historically disadvantaged students, as is happening in the charter sector, should not be ignored.

Evidence suggests that charters use their autonomy and flexibility to develop untraditional delivery models that give their students a step up in terms of college access and acceptance. (To gain a deeper understanding of this conclusion, please refer to Appendix Four.) The findings of this report suggest three policy recommendations that would help improve college outcomes for California’s public school students.

1: Step Up Graduation Requirements
A-G completion rate is significantly correlated to UC application and acceptance (see Appendix Three). Charter schools excel on all these measures in part because these measures are closely aligned to one another. Schools that attempt to increase their A-G completion rates therefore are likely to see improved college outcomes for their students. Accountability and models of course access should reinforce the need for access to A-G completion for all historically disadvantaged students as one of the starting points to ensure educational equity in college going outcomes.

2: Improve Postsecondary Data Collection
This report relies upon data generously supplied by the UC and CSU systems. These data are sufficiently robust to understand the state of college readiness in California public high schools as well as to identify trends and differences among groups of schools. However, data about all college applications (including private, California public, and out-of-state public universities), acceptances, and enrollment would provide a more complete picture that would be meaningful even for individual schools. Data about career outcomes as well as college persistence and performance would also be beneficial for additional research into what is working for charter schools and how to replicate their students’ college and career readiness.
3: Expand the Charter Sector

Charter schools provide impressive levels of college access, especially for historically disadvantaged students. Opening more high-quality, autonomous charters is a promising way to give our students a step up into the world of higher education. The impact of more high quality charter schools on all of their students will have positive effects far into their college and career futures. As illustrated by Benito’s story at the beginning of this report, access to a high quality college preparatory culture and curriculum in his charter school made a life-changing difference. With his younger siblings now following in his footsteps, Benito notes: “I view the world and what is possible for my future differently than I did before a college path was laid out for me in middle school and into high school. My high school believed in me and supported me to get this far.” Benito graduated from GPA in 2015 and received a $40,000 Chancellor’s scholarship from the University of California, San Diego where he is currently studying Engineering and Math. “I plan to use what I learn to help me and my family to have a better life.” For all of the Benitos in California and the hundreds of thousands of other students facing challenging circumstances, more access to higher education is a critical need and charter schools have provided an important part of the solution.
APPENDIX 1

Methodology and Limitations
A-G Completion

**KEY MEASURE:**
Percent of graduates who earned a C or better in fifteen courses in the A-G curriculum.

We analyze data from the California Department of Education, recorded annually from 2008 to 2013. “This data includes summer graduates and does not include students with high school equivalencies, such as, General Educational Development (GED) test or California High School Proficiency Examination (CHSPE).” Data is available for all schools that have at least one graduate, and subgroup-level data is available whenever there is at least one graduate in that subgroup. Data is reported only for ethnic/racial subgroups – e.g. African-American, Latino, Asian, and White – not for students with disabilities, English Learners, or low-income subgroups.

Note: We use the “number of graduates” data from this file as the denominator for the college application, acceptance, and enrollment variables in this report.

A-G completion measures a minimum standard in course-taking. In order to offer students a complete suite of A-G courses, schools must submit details about the content and assignments of each course to the UC system. Courses are approved only if they meet a minimum level of rigor. Additionally, the A-G structure requires that students get a C or better in courses spread across a full range of subjects:

<table>
<thead>
<tr>
<th>LETTER</th>
<th>SUBJECT</th>
<th>YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Social Science</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>D</td>
<td>Laboratory Science</td>
<td>2</td>
</tr>
<tr>
<td>E</td>
<td>One Non-English Language</td>
<td>2</td>
</tr>
<tr>
<td>F</td>
<td>Visual and Performing Arts</td>
<td>1</td>
</tr>
<tr>
<td>G</td>
<td>Elective</td>
<td>1</td>
</tr>
</tbody>
</table>

Of course, A-G completion has limitations. The harshness of grading, breadth of instruction, and depth of learning all vary from teacher to teacher and school to school. A-G does not reveal whether students chose the most or least difficult suite of A-G-compatible courses available in their school. Nor does A-G reveal the extent to which students take courses beyond these fifteen minimum requirements.

These limitations make Appendix Three especially important. We find that A-G completion rate is more highly correlated with UC acceptance and enrollment rates than average state standardized test scores. Further research should investigate the extent to which different high school outcomes prepare students for college success.
UC Application and Acceptance

KEY MEASURE:  
Percent of graduates who apply to (or are accepted by) the UC system.

We analyzed data from the University of California Office of the President, recorded annually from 2011 to 2013. Data is available for all schools that have at least five students apply to the UC system. The only subgroup with consistently available information is the combination of Black and Latino students. The denominator is the “number of graduates” data from the A-G file (see above).

The main limitation with this data concerns its linkage to high schools. We were able to link UC data to 173 charter schools and 985 traditional schools in 2013. For both types of public school, this is fewer than half of all schools with graduates. There are two reasons why a school could be missing UC data:

• Fewer than five students applied to the UC system
• We were unable to link the school to its UC data

This uncertainty motivated us to remove schools that lack this data from our UC analyses. Including those schools would require a problematic assumption. We would have to assume those schools have some number (probably between 0 and 4) of applicants and accepted graduates. If a school had fewer than five students apply, we have no information about what number between 0 and 4 is most accurate. For schools with a very low number of graduates, the application rate could vary widely depending on what assumption we would make. If a school is missing data because we were unable to link it to the UC data, then we would be making an even more inaccurate assumption because the school would really have five or more applicants.

Including only the schools with UC data gives us a somewhat limited view of California schools. However, we believe it is better to analyze this limited view than it is to expand the scope by making problematic assumptions for schools with missing data.

We did not have application or acceptance data for other colleges. While more data would have been valuable, we believe it is useful to focus on the UC system in particular. Appendix Two shows that compared to the CSU system, the UC system has a mission to serve higher-performing students. It also shows that the UC system had an average total cost – after aid – of $12,500 in 2012-13. This is relatively inexpensive when compared to most private universities.
Public College Enrollment

**KEY MEASURE:**
Percent of graduates who enroll in the UC and/or CSU systems.

We analyzed data from the University of California Office of the President and the California State University Chancellor’s Office, recorded annually from 2011 to 2013. Data is available for all schools that have either at least five students apply to the UC system or at least five students enroll in the CSU system. The only subgroup with information consistently available in both the UC and CSU datasets is the combination of Black and Latino students. The denominator is the “number of graduates” data from the A-G file (see above).

For these analyses, we include schools that have at least UC or CSU enrollment data. For schools that are missing enrollment data from one of these systems, we assume that the enrollment is zero.

We do not have enrollment on private and out-of-state colleges. Nevertheless, we believe that it is valuable to focus on public college enrollment for two reasons. First, this is a large proportion of all graduates statewide. Of all California high school graduates who go on to any type of college, approximately 80% enroll in the UC, CSU, or California Community College (CCC) systems. Second, this is a relatively affordable option for graduates. Appendix Two shows that the total cost of attending the UC and CSU systems – after aid – in 2012-13 was just over $12,000 a year, which is only slightly higher than attending a CCC.

**CSU Remediation, Performance, and Persistence**
Key Measures:
• Remediation = Percent of students enrolled in a CSU needing remediation (average Math and English)
• Performance = Average college GPA of students attending a CSU
• Persistence = Percent of students enrolled in a CSU who continued into their second year

We analyzed data from the California State University Chancellor’s Office, recorded annually from 2011 to 2013. Data is available for all schools that have at least five students enroll in the CSU system. The denominator is the number of students who enrolled in the CSU system. (Of schools with data in 2013, an average of 41 students enrolled in the CSU system.) We wish we had comparable data for all students who enrolled in college, especially into the UC system. However, this information from the CSU system tells us about the prepared-ness of students who enroll into a CSU from each high school.
Analyses Conducted

Unless otherwise noted, our analyses are averages of all the available school-level data. This report focuses on all students as well as African-American and Latino students combined because those are the only student groups with consistently available data. The table below explains what information is available for each dataset:

<table>
<thead>
<tr>
<th>SUBGROUPS</th>
<th>Years</th>
<th>Black</th>
<th>Latino</th>
<th>Asian</th>
<th>White</th>
<th>EL</th>
<th>SpEd</th>
<th>FRL</th>
<th>1st Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-G Completion Rate</td>
<td>2008 - 2013</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UC Application and Acceptance</td>
<td>2011 - 2013</td>
<td>X*</td>
<td>X*</td>
<td></td>
<td></td>
<td>X**</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>UC/CSU Enrollment</td>
<td>2011 - 2013</td>
<td>X*</td>
<td>X*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>CSU Performance and Persistence</td>
<td>2011 - 2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSU Remediation (English and Math)</td>
<td>2011 - 2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X* = Data for Black and Latino students are combined
X** = The income threshold is not exactly identical to the FRL definition (household income <$40K)
Public higher education in California pursues both excellence and accessibility. To accomplish these two goals, the *Master Plan for Higher Education*, passed in 1960, gave distinct roles to three systems. The systems differ widely in terms of their size, mission, and selectivity.
<table>
<thead>
<tr>
<th></th>
<th>CALIFORNIA COMMUNITY COLLEGES (CCC)</th>
<th>CALIFORNIA STATE UNIVERSITY (CSU)</th>
<th>UNIVERSITY OF CALIFORNIA (UC)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td>1.1 million students at 112 colleges</td>
<td>379,000 students at 23 campuses</td>
<td>249,000 students at 10 campuses</td>
</tr>
<tr>
<td><strong>Mission</strong></td>
<td>“Providing citizenship and English as a second language courses, basic skills instruction, career technical education, and transfer to baccalaureate institutions.”</td>
<td>“Undergraduate education for the top 1/3rd of California public high school graduates as well as graduate education through the master’s degree.”</td>
<td>“Research; professional, doctoral, and other graduate education; and undergraduate education for the top 1/8th of high school graduates.”</td>
</tr>
<tr>
<td><strong>Selectivity</strong></td>
<td>All adults admitted</td>
<td>Mean GPA: 3.29 Mean SAT: 979 (of 1600)</td>
<td>Mean GPA: 3.86 Mean SAT: 1166 (of 1600)</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td>Without Aid: $14,400 With Average Aid: $9,700</td>
<td>Without Aid: $20,900 With Average Aid: $12,300</td>
<td>Without Aid: $29,100 With Average Aid: $12,500</td>
</tr>
</tbody>
</table>

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**Notes:**

- Size: 112 colleges for CCC, 23 campuses for CSU, and 10 campuses for UC.
- Mission for CCC includes a wide range of educational offerings.
- Mission for CSU focuses on undergraduate education for top 1/3rd of high school graduates.
- Mission for UC includes research and graduate education for top 1/8th of high school graduates.
- Selectivity at CCC is for all adults admitted.
- Selectivity at CSU and UC is based on GPA and SAT scores.
- Total Cost for 2012-2013 includes both without aid and with average aid.

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**References:**

- “Providing citizenship and English as a second language courses”
- “Undergraduate education for the top 1/3rd of California public high school graduates”
- “Research; professional, doctoral, and other graduate education”
APPENDIX 3
Correlation Analysis
Correlations Between High School and College Outcomes

This report measures a school’s college access using the following factors: the percent of graduates who enroll in CSUs and UCs, and the percent of students accepted into the UCs out of the school’s graduates. Here we analyze how well certain academic performance factors correlate with these college access outcomes. From a scale of zero to one, with one being perfectly correlated, we find that factors have moderate to low correlations to college access.

Compared to other college outcomes, CSU enrollment tends to be much less correlated to high school performance. This suggests that the percent of graduates who enroll in a CSU is a relatively poor measure of college access. The most likely explanation is that CSU is much less selective than the UC system, whether measured in terms of its target population (top third v. top eighth), average high school GPA of enrolled students (3.29 v. 3.86), or average SAT score of enrolled students (979 v. 1166). We therefore focus on the other college outcomes.

The table below lists measures of high school achievement from most to least correlated to college outcomes. A-G completion rate is highest: over 0.5 correlated with UC enrollment and acceptance. The second most correlated factor is the Academic Performance Index (API), a school achievement measure based on discontinued state exams. API is 0.5 correlated to UC acceptance and 0.4 correlated with UC enrollment. California High School Exit Exam (CAHSEE) pass rates have a slightly weaker relationship to college access variables: 0.4 for UC acceptance and 0.3 for UC enrollment. Lastly, cohort graduation rates exhibit the lowest correlations between the academic performance factors and the college access outcomes, all near 0.1.

<table>
<thead>
<tr>
<th>Measure</th>
<th>% UC ENROLLED</th>
<th>% CSU ENROLLED</th>
<th>% UC &amp; CSU ENROLLED</th>
<th>% UC ACCEPTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-G Completion Rate Rate</td>
<td>0.5168*</td>
<td>0.2345</td>
<td>0.4513</td>
<td>0.5832*</td>
</tr>
<tr>
<td>Academic Performance Index (API)</td>
<td>0.3965</td>
<td>0.1344</td>
<td>0.3146</td>
<td>0.5049</td>
</tr>
<tr>
<td>CAHSEE Math Pass Rate</td>
<td>0.3374</td>
<td>0.1685</td>
<td>0.3057</td>
<td>0.4252</td>
</tr>
<tr>
<td>CAHSEE ELA Pass Rate</td>
<td>0.3206</td>
<td>0.1174</td>
<td>0.2607</td>
<td>0.4113</td>
</tr>
<tr>
<td>4-Year Graduation Rate</td>
<td>0.0752</td>
<td>0.1194</td>
<td>0.1251</td>
<td>0.1347</td>
</tr>
</tbody>
</table>

*The highest correlations are in green

What does this all mean, and why is it important? Higher correlations mean that two factors measure more similar things. Therefore, A-G completion is the high school measure most similar to college access. Conversely, cohort graduation rate is least similar to college access. These findings suggest that strategies for improving students’ college access will be most successful if they focus on A-G completion, the high school measure most highly correlated to college outcomes.
APPENDIX 4

Testing Hypotheses for Positive Charter Results

How do charters obtain the results detailed in this report? Some suggest that charter schools serve smaller populations of historically underperforming demographics of students, therefore unfairly raising their achievement as compared to traditional schools. Others hypothesize that charter schools’ tendency to be located in urban areas explains their performance. Perhaps the most common myth is that charters regularly “skim” off the best students from traditional schools. Charter advocates suggest a fourth hypothesis: that the very autonomy and flexibility provided through charter laws are what allow charter schools to thrive. **Four hypotheses are explored in detail below and the only one with statistical evidence is that charter schools' autonomy and flexibility is a crucial ingredient for success.**

Charter schools’ autonomy and flexibility is a crucial ingredient for success.
We can test whether three historically disadvantaged subgroups influence the patterns outlined in this report. The table below summarizes the descriptive statistics for each of the datasets we analyzed, comparing charter to traditional schools. Charters in these datasets tend to serve approximately the same percentage of African-American and Latino students, slightly fewer English Learners, and more students eligible for free or reduced lunch. Even without further analysis, this makes it very unlikely that demographics can explain the impressive results charters obtain.

<table>
<thead>
<tr>
<th></th>
<th>UC DATASET vii</th>
<th>UC/CSU DATASET viii</th>
<th>A-G DATASET viii</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American &amp; Latino</td>
<td>57% vs 56%</td>
<td>55% vs. 57%</td>
<td>55% vs. 57%</td>
</tr>
<tr>
<td>English Learner</td>
<td>9% vs. 11%</td>
<td>9% vs. 12%</td>
<td>10% vs. 12%</td>
</tr>
<tr>
<td>Free/Reduced Lunch</td>
<td>57% vs. 51%</td>
<td>56% vs. 52%</td>
<td>56% vs. 52%</td>
</tr>
</tbody>
</table>

We run pairs of regressions to test whether these slight demographic differences explain why charters outperform traditional schools on these measures. Four pairs of regressions analyze the four outcomes this report analyzed: (1) UC acceptance, (2) UC enrollment, (3) UC/CSU enrollment, and (4) A-G completion rates. The first regression in each pair is binary, only including the outcome and a dummy variable indicating whether or not a school is a charter. Each binary regression produces a positive and significant coefficient for the charter variable. This means that charter schools are statistically likely to have higher outcomes on all four of these measures.

The second regression adds three independent variables to control for the demographic factors mentioned above: the percent of students who are African-American or Latino, English Learners, and eligible for free or reduced lunch. The goal of this second regression is to determine the extent to which these demographic traits explain charter over-performance.

The results are consistent and unambiguous. In every pair of regressions, the coefficients for charter school are statistically significant and indistinguishable. This means that these demographic factors do not explain any of the difference between charter and traditional schools.
Perhaps charter schools’ superior results are caused by their location instead of their demographics. Since urban areas tend to be closer to UC and CSU campuses, students at urban schools are somewhat more likely to enroll in these schools. Across all three datasets, charter high schools are more likely to be in urban areas than their traditional counterparts. Could this explain why charters perform better?

Pairs of regressions test whether geographical differences explain why charters outperform traditional schools. The first in each pair is identical to the binary regressions described above. The second regression in each pair controls for four geographic zones: urban, suburb, town, and rural.

These results are almost as consistent as those for demographics. The charter coefficient remains significant when we look at UC acceptance, UC enrollment, and A-G completion. This means that even when controlling for geography, charter schools are significantly more likely to have higher outcomes.

The only time this is not true is the model for UC/CSU enrollment. The p-value rises to 0.143, which we can interpret as meaning that there is a 14% chance that the difference we see between charter and traditional schools is caused by random chance. (Traditionally, only p-values of 0.05 or lower are considered statistically significant.) Nonetheless, geography cannot explain charter over-performance for three of the four measures we analyze.
Some have attempted to explain away charters’ success by theorizing that charter schools skim the most motivated students from traditional schools. Therefore, they argue, charters’ success is more about student motivation and incoming students’ attributes and less about the schools’ effectiveness. Any attempt to test this claim directly faces two difficulties. One, it would require a measure of motivation for students at every school. This would necessitate giving a survey about motivation to all public students in the state, a costly endeavor. The second difficulty is much more intractable: testing this claim requires controlling for the motivational impact that schools have on their students.

Imagine two schools whose students start the school year with identical levels of motivation. What if the teachers and culture at the first school encourage students to become more motivated starting on day one, while the second school has no such impact? A survey would find that the students at the first school are more motivated. However, it would be wrong to conclude that the students at the first school started with an advantage. The fact that schools influence the motivation of their students makes it nearly impossible to directly test this claim.

Thankfully we can indirectly test whether charters skim the most motivated students. We do this by testing an implication of the theory. The graphic below shows combined UC and CSU enrollment, with the red line detailing charter schools’ performance and the grey line traditional schools’ performance. If charters skim, then they would have a consistently higher number of more motivated students. The implication is that charters would outperform traditional schools by a similar margin year after year on all measures of achievement. Hence, you would see the dotted grey line in the graph below: charter schools’ performance starting above and staying at a consistent distance from that of traditional public schools. However, this is not what occurs.

A-G completion shows the same pattern as UC/CSU enrollment: the gap between charter and traditional schools has widened over time. In terms of the graph above, the red line shows a very different trend than the dotted line. In contrast, UC acceptance and UC enrollment rates show a constant gap, which is consistent with a consistent skimming argument. Therefore, any skimming hypothesis could at most only explain the patterns for only half of the outcomes this report analyzed.
A Step Up: How Charter Schools Provide Higher Levels of California Public University Access

If demographics, geography, and skimming cannot explain why charters outperform traditional schools, then what is the explanation? Evidence points to the autonomy and flexibility that most charters enjoy. Autonomous charters can be stand-alone (i.e. freestanding) or part of a charter management organization (CMO) or network. Non-autonomous charters either:

• Have a majority of their board appointed by their authorizer, or
• Are under a school district’s collective bargaining agreement, are indirectly funded, and are not incorporated as a 501(c)3 organization.

Binary regression analyses show that autonomous charters achieve statistically higher performance ($p < 0.05$) than non-autonomous charters on all four of the measures we analyze. Statistically, autonomy is a factor that can explain how charter schools have such high performance.

The graph below exemplifies the pattern we see across all four outcomes. Non-autonomous charters perform very similarly to traditional schools. Autonomous charters perform the best, regardless of whether they are freestanding or part of a CMO or Network.

Anecdotal evidence supports the importance of autonomy. Communities often choose to convert a traditional school to an autonomous charter school because they want the freedom and flexibility to better serve their students. Vaughn Next Century Learning Academy, mentioned above, pioneered this educational innovation. Autonomous “start-up” charters rely on parents choosing to send their children to that school. To gain and keep that trust, charters like Alliance Marc & Eva Stern Math and Science School (Stern MASS) need a track record of success.

Even theory supports this claim. By definition, districts control the actions of non-autonomous charters. Unable to operate independently of the districts, non-autonomous charters unsurprisingly attain results nearly identical to traditional schools. Autonomous charters possess the flexibility necessary to try a variety of innovations in order to better serve their students.
There are two concerns about all three datasets. One is that "the school name inputted by the student on the [ACT/SAT/AP] exam was used by the College Board to generate the academic institution [AI] code." Therefore, the very process of connecting students to their schools contains an unknown amount of error.

The second concern is that all of these exams are usually paid for by students and their families. The data will be skewed against relatively poor students to the extent that they do not take or retake these exams because of cost considerations. The ACT/SAT is particularly problematic because students can take both tests several times in a year and only a student’s highest score get reported. Wealthier students are not hindered by the testing fee when deciding whether or not to retake these exams.
ACT/SAT
It is unknown which students took both or only one of these exams. If information from both tests is used, then schools with the most students taking both exams look the best. If only the test with higher performance/participation is used, then schools will be unfairly punished the closer they approach the scenario where 50% of students take only the ACT and 50% take only the SAT.

SAT Participation
The highest participation rates tend to occur at the highest- and lowest-income schools. The latter occurs because sometimes entire low-income schools qualify for the SAT fee waiver. Cost therefore seems to have a large influence on this measure.

ACT/SAT Performance
There is a negative relationship between participation and average performance. Schools that encourage their lower-performing students to take these tests tend to have lower average scores.

This problem is avoided by using the percent of all enrolled students who score above a particular threshold: 1500 on the SAT and 21 on the ACT. Participation only impacts this measure of performance if students who would have scored above the threshold don’t take the test.

Advanced Placement (AP)
Data on International Baccalaureate (IB) or dual enrollment programs with local colleges is unavailable. All AP measures will be biased against schools that use these other programs instead of AP tests. Therefore, AP participation is only a good way to differentiate between schools that exclusively utilize the AP program.

AP Performance
There is a negative relationship between participation and average performance. Schools that encourage their lower-performing students to take AP tests tend to have lower average scores.

This problem is not easily avoided. California reports the percent of all tests taken that 3, 4 and 5 at each school, but it does not report the percent of all test-takers who score 3, 4 and 5. Therefore, the percent of all enrolled students who score above a particular threshold cannot be calculated.

Conclusion
CCSA Analysts calculated a large number of ACT, SAT, and AP measures and found the performance variables in particular to be highly correlated to college outcomes such as percent of graduates accepted to the UC system. Unfortunately, there is concern that this correlation may be driven by the fact that high parent income is correlated with both college outcomes and high ACT, SAT, and AP performance measures. More importantly, there are too many concerns with these variables to use them to make high-stakes decisions about individual schools.
Endnotes

i For each year (2011, 2012, and 2013), data is available for all schools that have at least 5 students apply to the UC system. Students self-report their high school on their application.


iii These numbers reflect schools that (1) serve twelfth grade and (2) were successfully linked to UC data. Please see Appendix One for more details.

iv Unless otherwise noted, numbers reflect the average of all available school-level results.

v Unfortunately, we are unable to calculate acceptance rates for low-income or first generation students because we lack the necessary denominators (i.e. the number of graduates from each school in those categories).

vi Children from families with incomes at or below 130 percent of the poverty level are eligible for free meals. (www.fns.usda.gov/sites/default/files/NSLPFactSheet.pdf).


viii The most rigorous answer would require comparing students who were randomly chosen, or not, from a waitlist to attended charter high schools. Unfortunately, we do have access to this type of data.

ix www.ucop.edu/agguide/a-g-requirements/index.html


xii www.cde.ca.gov/.../fs/gradaf09.asp


xiv Data is based on enrolled freshman and based on all schools with information available at www.collegedata.com

xv Total cost includes tuition, books, other school supplies and living expenses. From “2015-16 Budget: Higher Education Analysis,” page 68 – figure 34.

xvi Includes all schools that had at least five students apply to a UC.

xvii Includes all schools that had at least 5 students enroll in a UC, CSU, or CA community college.

xviii Includes all schools that served seniors.

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