

Success for English Learners in Charter Schools

An exploration of English Learner academic achievement and best practices in California's Charter Schools.



Table of Contents

3	Executive Summary
13	Introduction
15	Background
16	English Learners in Charter Schools Have Higher Levels of Academic Achievement
16	Schoolwide Outcomes
17	API Scores
18	Similar Student Metrics
20	Proficiency Rates
23	English Learner Enrollment at Charter Schools Varies Widely
23	Statewide Enrollment
30	Enrollment by Region
33	Why the Differences in English Learner Enrollments? A Testing of Three Hypotheses
33	Reclassification
34	Identification
35	Recruitment: Challenges and Best Practices
35	Challenges Faced in Recruitment of English Learners
36	Best Practices in Recruitment Identified by Schools With High English Learner Populations
38	Innovative Practices with English Learner Students Lead to Success
40	Mission and Vision
41	Instructional Practice
41	Differentiated Instruction
42	Response to Intervention (RTI)
42	Extended or Systematic English Language Development (ELD)
43	English Language Development Infused Schoolwide

43	Guided Language Acquisition Design (GLAD)
43	Rigorous Curriculum Design
44	Extended Learning
45	Professional Development
47	Parent Engagement
47	Challenges
48	Teacher Quality
49	Conclusion

51	Appendix A: Glossary of Acronyms & Definition of Key Terms
53	Appendix B: Literature Review
53	English Learner Identification
54	Reclassification
56	Self-Selection and Student Populations
56	Recruitment of English Learners in Charter Schools
57	English Learners' Achievement Gains in Charter Schools
58	School-Wide Reforms
59	Instructional Models
62	Extra-Curricular Strategies
63	Parent Engagement Research
64	APPENDIX C: Value-Added Analysis Methodology
68	APPENDIX D: Type of Charter School: Levels of Autonomy, Classroom Setting, and Urban/Rural Differences
69	Appendix E: Methodology and Limitations
70	Appendix F: Materials Cited
78	Endnotes

Executive Summary

This study explores trends in English Learner (EL) student enrollments and academic outcomes in California's charter schools. Our data analyses included the use of publicly available data to review public charter school student performance with that of traditional school performance. To better understand best practices with English Learner students, we interviewed numerous leaders of charter schools that have high EL populations and strong academic outcomes with their EL student populations.

In sum, our interviews with school leaders and data analysis have supported two major findings:

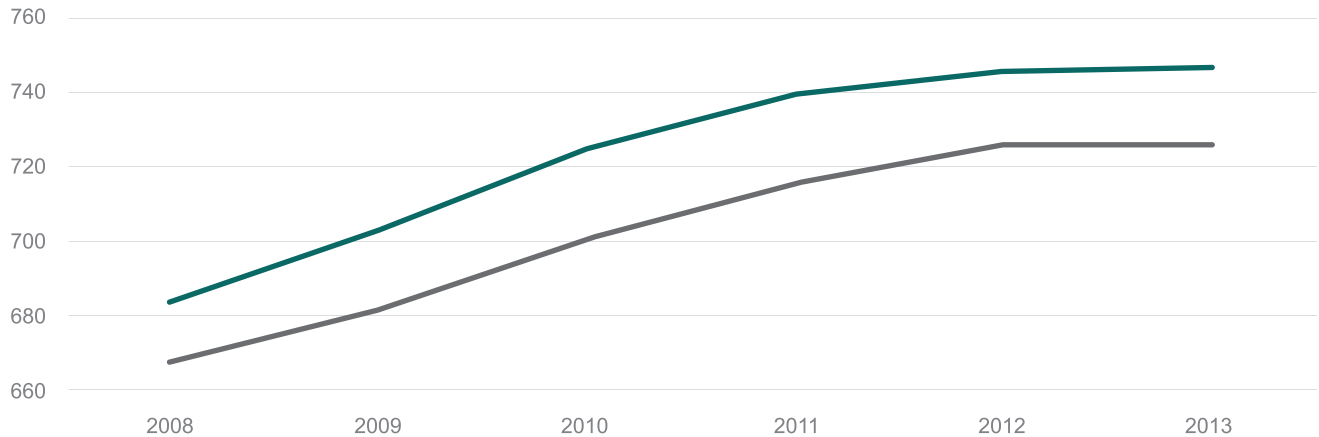
1. Across several data sources and over several years, EL student performance is higher at charter schools. While some of the differences were modest, the consistency of this finding was striking.
2. In general, EL enrollments are lower at charter schools than at comparable traditional public schools. However, different disaggregations (by charter type, urban-rural, grade level and region) show varying sizes in the gap (with the gap closed in some instances).

Charter Schools English Learners Outperform their Traditional Student Counterparts

Charter schools have had superior outcomes with their EL students compared to traditional public schools across multiple measures of performance, including the results of our student-level value-added analysis. While some of the differences were modest, the consistency of this finding was striking.

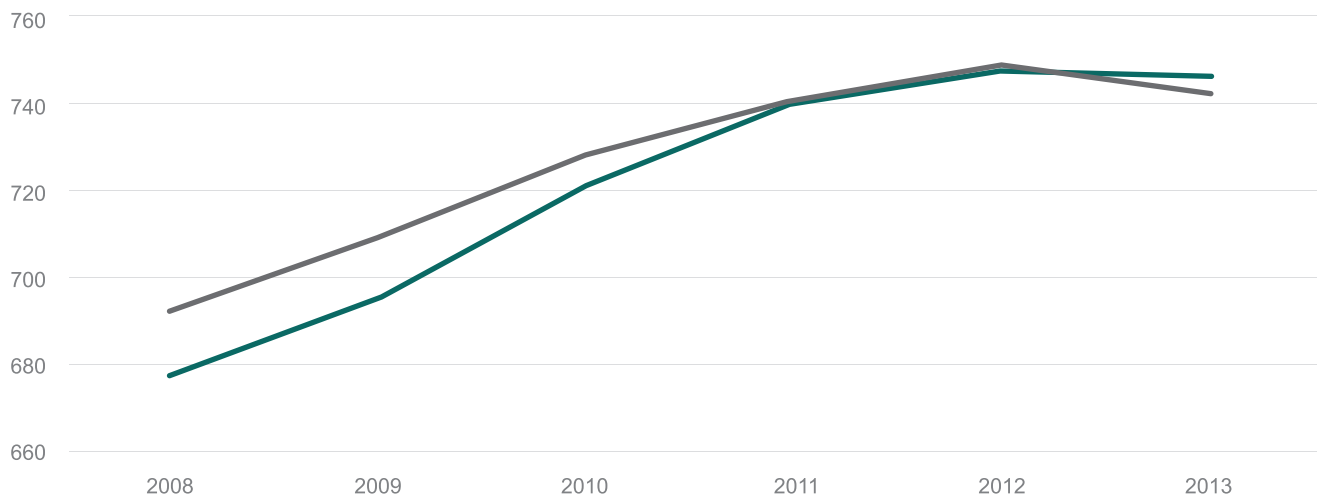
API Scores: EL students at charter schools showed higher levels of academic achievement and academic gains over time. ELs at charter schools outperformed those at traditional schools over the past four years, based on both EL API and proficiency rate data. Our analysis of EL API scores showed that charter EL students tended to outperform their traditional public school counterparts year after year. It is important to note that these differences were relatively small, with the gap amounting to 19 points in 2012-13. What is worth noting is the consistency with which charter EL students have outperformed traditional public school ELs on the API.

FIGURE 1: Student-Weighted EL API Growth Scores in Charters and Traditional Public Schools ■ Charter ■ Traditional



The previous chart allows us to compare charter school students with traditional public schools as if the whole state were a single school. That is a useful analysis to measure student gains. Another way to look at this data is to assess the API score of EL subgroups at each school. This average will show us how schools are performing. This data shows us that in 2008, the EL subgroups at charter schools were, on average, lagging behind traditional public schools. However, by 2011, that gap had completely closed, and by 2013, the average charter school EL subgroup had a higher API than that same group at traditional public schools.

FIGURE 2: Average EL API Growth Scores in Charters and Traditional Public Schools ■ Charter ■ Traditional



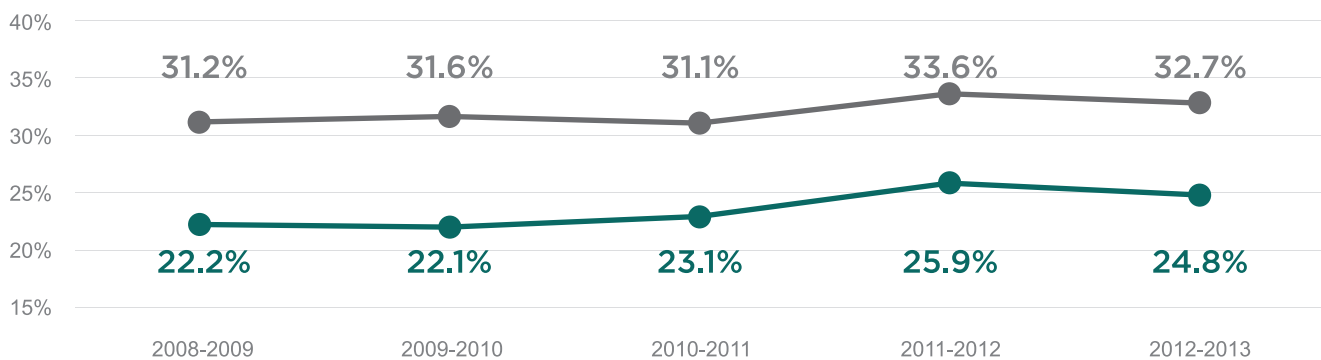
Clearly, charter schools have made gains in educating their EL students, and as shown later in this report, these gains have been made as charter schools have increased their enrollment of EL students by 2.6% since 2008, while traditional public schools have only increased their EL enrollment by 1.5% over the same period.

Charter Schools Enroll Fewer English Learners, but the Differences Shrink Dramatically for Urban and Suburban Charter Schools

When looking at statewide averages, charter schools enroll 8% fewer EL students when compared to traditional public schools. However, the story is not that simple. When we look at urban and suburban charter schools, the difference is only 2% when compared to urban and suburban traditional public schools. The largest discrepancy is concentrated in the rural charter schools; these schools have a difference of over 11% when compared to their traditional public school counterparts.

More specifically, statewide EL student enrollment in charters is 8.4% lower than at traditional public schools. The charter-traditional public school gap in EL enrollment has narrowed slightly over time (from 9% in 2008-09 to 7.9% in 2012-13).¹

FIGURE 3: Average EL Enrollment Rates for Charter and Traditional Public Schools ■ Charter ■ Traditional

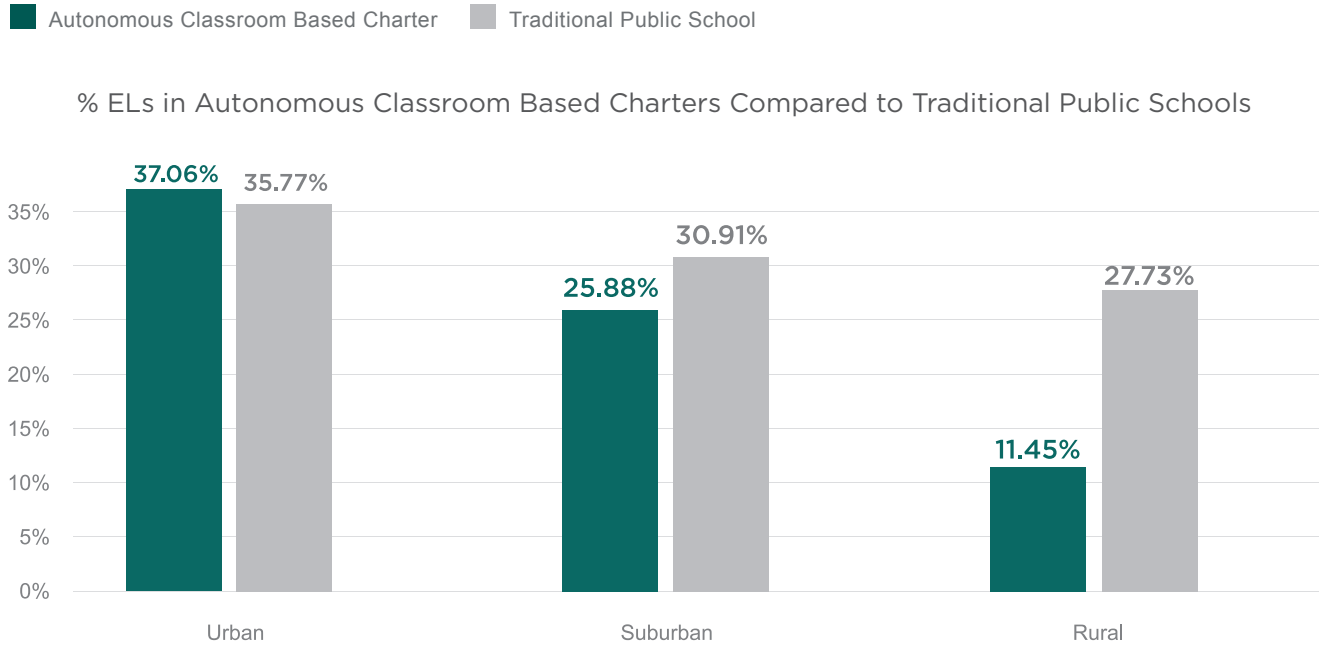


On average, charter schools have narrowed the gap over time from 9% fewer EL's in 2008-2009 to under 8% in 2012-2013.

All Schools, Excluding ASAM		2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Charter	# EL Students	46,251	51,744	59,020	69,559	76,817
	Total # Students Tested	207,989	234,177	255,020	268,649	309,739
	Schools with Data	644	727	804	886	969
Traditional Public	# EL Students	1,365,801	1,369,856	1,345,408	1,354,683	1,308,909
	Total # Students Tested	4,376,979	4,341,770	4,324,638	4,026,706	3,998,725
	Schools with Data	7,595	7,628	7,690	7,693	7,672

School Location: Using enrollment reported in API data files, autonomous classroom-based charter schools have nearly closed the EL enrollment gap in urban and suburban areas.² Specifically, we see that autonomous, classroom based charter schools (which make up the majority of California charter schools) have closed the gap in EL enrollments in urban areas.³ As shown in Figure 4, EL's in urban traditional public schools make up 36% of all tested students, while in urban autonomous charters, over 37% of tested students are EL's. Charter schools enroll a smaller percentage of EL students in suburban and rural schools.⁴

FIGURE 4: Autonomous Charter School and Traditional Public School % EL Enrollment by Urbanicity

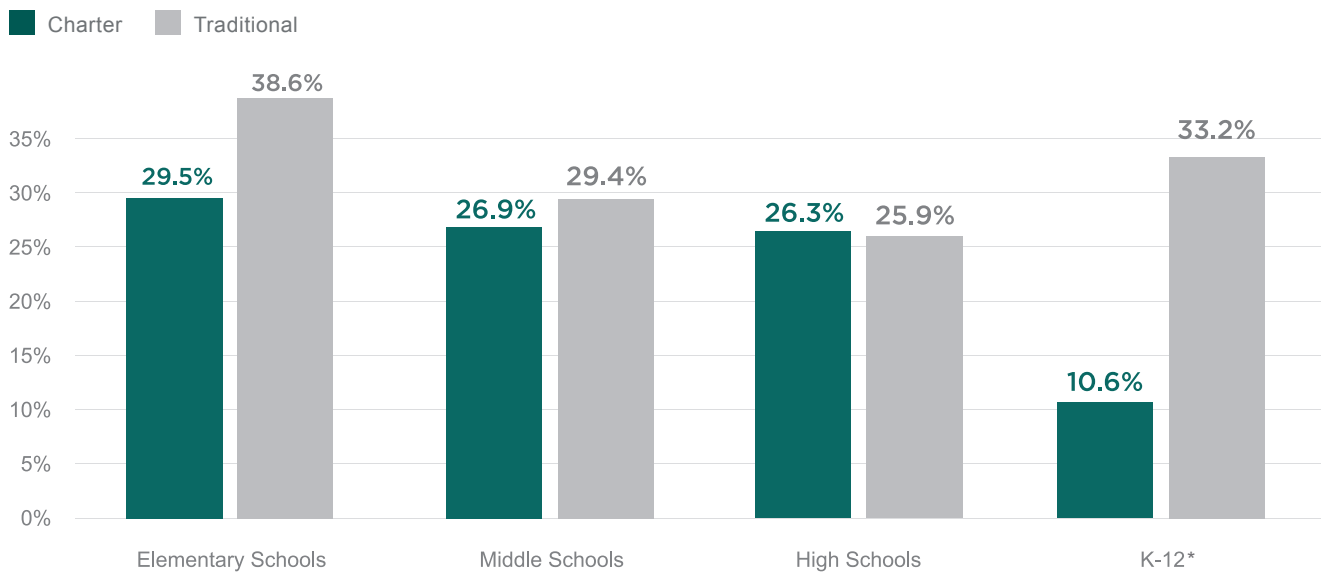


All Schools, Excluding ASAM		Urban	Suburban	Rural
Autonomous Classroom-Based Charters	# EL Students	38,242	12,919	358
	Total # Students Tested	103,194	49,920	3,127
	Schools with Data	344	157	25
Traditional Public Schools	# EL Students	592,797	661,647	60,132
	Total # Students Tested	1,657,187	2,140,898	216,884
	Schools with Data	3,183	4,131	835

This same analysis would suggest that rural charter schools, particularly nonclassroom-based rural charters, are a main driver of the EL enrollment discrepancy statewide. Rural autonomous classroom-based charter schools have EL enrollments of 11.45% compared to rural traditional public schools, which have EL enrollments of 27.73%. When we look at rural autonomous nonclassroom-based charter schools we see an even lower rates of EL enrollment, with these charters having EL enrollments of only 3.7%.

Grade Level Differences: The EL charter-traditional public school enrollment gap is largest in elementary schools and narrows substantially at the middle and high school levels, with charter schools actually enrolling a higher percentage of EL students in high school than traditional public schools. The small percentage of K-12 schools in the data set have the largest EL enrollment differences.⁵

FIGURE 5: Percentages of ELs across School Types in 2012-2013 (using API demographic data)

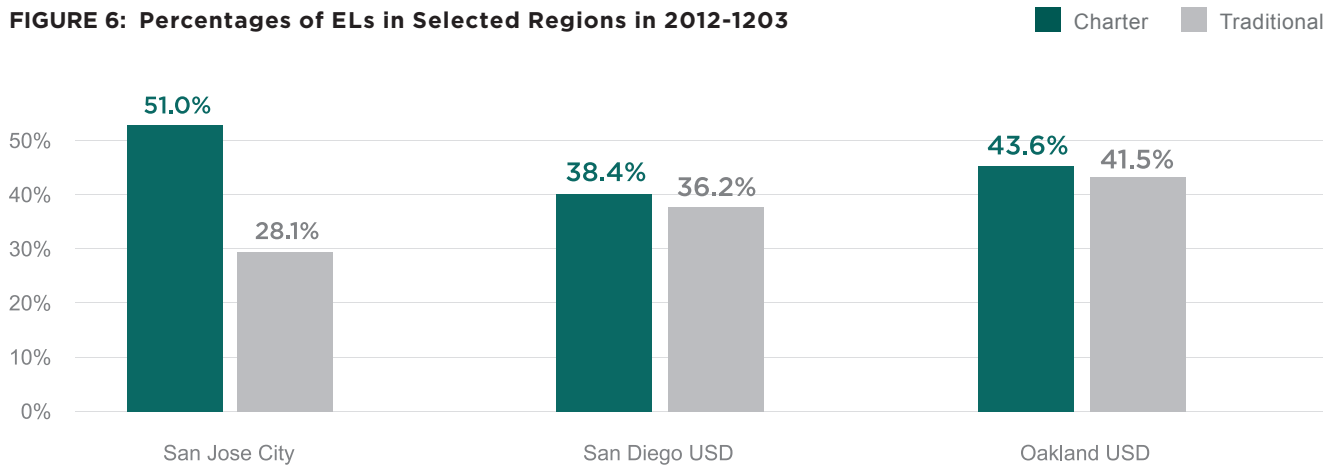


* Note: The small number of traditional public K-12 schools does not make a robust comparison with charter K-12* schools possible. See endnote below for more details.

	All Schools, Excluding ASAM	Elementary	Middle	High School	K-12
Charter Schools	# EL Students	35,752	14,428	20,648	5,989
	Total # Students Tested	121,286	53,677	78,518	56,258
	Schools with Data	473	133	256	107
Traditional Public Schools	# EL Students	727,445	272,967	304,994	3,503
	Total # Students Tested	1,883,228	928,003	1,176,951	10,543
	Schools with Data	5,228	1,219	1,186	39

Regional Differences: When enrollment trends are assessed regionally, we find that charter schools in Oakland and San Diego Unified School Districts serve about the same percentage of ELs as the local school district (within 3%). Charter schools in San Jose actually serve more ELs than traditional schools (51% vs. 28%).⁶

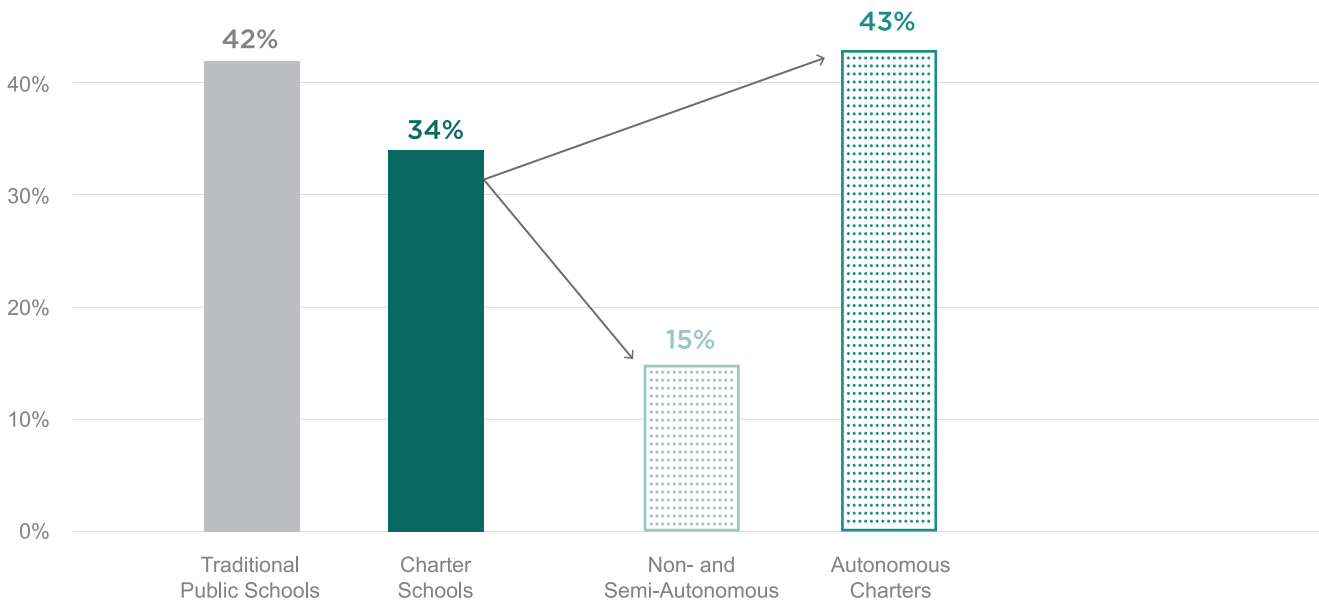
FIGURE 6: Percentages of ELs in Selected Regions in 2012-1203



		All Schools, Excluding ASAM	San Jose	San Diego	Oakland
Charter Schools	# EL Students		1,070	4,418	3,779
	Total # Students Tested		2,096	11,493	8,662
	Schools with Data		8	42	38
Traditional Public Schools	# EL Students		7,512	27,816	9,770
	Total # Students Tested		26,739	76,797	23,540
	Schools with Data		47	173	80

EL enrollment in California’s largest district, Los Angeles Unified School District (LAUSD), was 42% of tested students in its traditional public schools and 34% in its charter schools in 2012-13. This 8% difference masked a nuance in the data: LAUSD autonomous charter schools enrolled higher percentages of ELs than non-autonomous charter schools and higher than the traditional public school average.

FIGURE 7: Percentage of ELs in Los Angeles Unified School District by Governance Model, 2012-2013



School Type	Autonomy Status	Data Comparison	Total
Charter	Autonomous	English Learner N (% of Tested Students)	26,145 (43%)
		School N (% of LAUSD Charters)	184 (79%)
	Semi- and Non-Autonomous	English Learner N (% of Tested Students)	4,155 (15%)
		School N (% of LAUSD Charters)	49 (21%)
	Total	English Learner N (% of Tested Students)	30,300 (34%)
		School N (% of LAUSD Charters)	233 (100%)
Traditional Public	Total	English Learner N (% of Tested Students)	153,240 (42%)
		School N (% of LAUSD Traditional Public Schools)	662 (100%)

Once we accounted for this difference, that deficit became a **1% surplus!** ELs at autonomous charter schools serve a slightly higher percentage of ELs than LAUSD’s traditional public schools.

These data show that charter schools vary widely in the number of English Learner students that they serve. Schools with greater autonomy from the district and control over their enrollment, particularly in urban settings, serve higher proportions of English learners. Future research is needed as to why non-autonomous charters, nonclassroom-based charters and rural schools serve fewer English Learners. To get a better understanding of how schools successfully serving ELs work, we spent time investigating their best practices for educating and recruiting ELs.

What Works:

EL Recruitment and Instructional Best Practices from Charter School Leaders

Some charter schools are doing a truly extraordinary job taking on the challenge of serving EL students. In particular, we took an in-depth look at 18 charter schools that have not only a high percentage of EL students, but also high EL academic performance. The schools were diverse in geography, grade-level and approach and included four dual immersion programs. These 18 schools identified several best practices for effectively recruiting and educating EL students.

Challenges Faced in Recruitment

Schools noted a lack of accurate information and misperceptions about charters. Parents of ELs may mistakenly believe that charter schools are private, have admissions criteria, don’t accept EL students, or may use information provided on admission paperwork to check immigration status. Schools also noted that parents of ELs aren’t always receiving sufficient information about their public school option choices – including charter schools – from local school districts.

Best Practices in Recruitment Identified by Schools with High EL Populations

In particular, the charter school leaders we interviewed identified the importance of (1) leveraging strong community relationships, (2) proactive, assertive recruitment efforts focused on non-English speaking families, including multilingual outreach, and (3) word of mouth. Efforts to increase parent engagement were focused on planning parent events, promoting volunteerism, investing in bilingual staff, and providing parent education.

Best Practices in Instruction Identified by Schools with High EL Achievement

Through our interviews, we identified a number of research-based instructional practices that schools are using to improve learning outcomes for students. These include a focus on differentiated instruction, response to intervention strategies, small group instruction, and extended or systematic English language development courses. The schools had missions that exemplified inclusiveness, language mastery, and college readiness for their EL students.

The school leaders we interviewed shared a myriad of best practices that exemplified a strong commitment to serving historically underserved students in their local communities, holding themselves accountable to growing student achievement, and finding creative ways to engage parents. These schools provided impressive examples of executing on rigorous academic expectations for all students and holding staff accountable for student outcomes. We believe the lessons shared in effective recruitment and instructional practices are applicable not only to the inclusion and education of EL students in charter schools, but also to the achievement gap closing efforts seen in other historically underserved populations.

Given the vast and growing numbers of ELs in California schools, we have an obligation – indeed an imperative – to find the best and most appropriate ways to support ELs’ educational success. Our results suggest that while charter schools have made great strides in helping EL students achieve at high levels, we have more work to do. Some California charter schools have found success in recruiting and enrolling substantial EL student populations; other charter schools in the state can benefit from the lessons they share in overcoming the misperceptions and language barriers that may hinder parents of EL students from enrolling their children in charter schools. The academic performance results reported here outline many instructional best practices that all California schools, charter and traditional, could benefit from learning in their quest to help California EL students achieve.

Introduction

Given the expansion of charter schools in California over the past two decades, the intent of the Charter Schools Act of 1992 for charters to target students with low academic achievement, CCSA brought together quantitative and qualitative data to broadly analyze charter school impacts for English Learner (EL) students.

CCSA embarked on this study to explore the academic performance and enrollment trends of ELs in California's charter schools in order to:

1. Understand how charter schools compare to traditional public schools
2. Identify best practices at charter schools that have both high EL enrollments and achievement outcomes

The purpose of this report is to present findings that highlight how charter schools have faced the challenges and opportunities relevant to providing impactful educational options for EL students. It is our hope that the results presented herein will foster additional discussion among policymakers and an increased interest on the part of researchers to further examine innovative community-based practices that can help to close the achievement gap for the nearly 1.4 million EL students in California in both charter and traditional public schools.

As California's leading charter school membership organization representing California's 1,180 charter schools as of 2013-14, CCSA is well-positioned to explore these issues. CCSA utilized its unique access to charter school leaders who are showing results in their recruitment and education of EL students and selected 18 of them to participate in an interview and observation analysis for this study. We also utilized publicly available data from the California Department of Education (CDE) to analyze school-level trends in enrollment and performance from 2008-09 to 2012-13.

Academic performance trends showed promising results. Charter schools have had superior outcomes with their EL students compared to traditional public schools across multiple measures of performance, including the results of our student-level value-added analysis. While some of the differences were modest, the consistency of this finding was striking.

Conversations with school leaders frequently touched on the themes of structural flexibilities available to them as charter schools that allowed teachers and senior leadership the ability to make changes to instructional strategies, curriculum, and school mission as often as necessary. Rather than laud their own successes, the majority of our charter school leaders spoke at length about the hard work involved in constantly reevaluating and adjusting practices to meet individual students' educational needs.

We also examined EL student enrollment patterns and found wide disparity in the EL populations at charter schools. Looking behind average enrollment rates, we found some charter schools in our analysis that were enrolling many more EL students than their traditional public school neighbors and we also found other charters enrolling many fewer students. Throughout our analysis we did not find any evidence to suggest that students were being turned away or counseled out. In fact, we found anecdotal evidence that as word of mouth advertising about a school increases in the second language communities, the EL populations increase. Although not the focus of this study, we suspect that these lower enrollments of ELs and some schools are due to structural and system impediments – parents don't know about the schools, they don't know they have a choice in their child's school, etc. This is an area of further research that we hope to look into in the future.

These themes highlight the variation in school outcomes with ELs across the charter school movement. Our results show that many charter schools are actively taking on the challenge of serving EL students by locating in high-need communities with historically underperforming schools and high EL populations. Others are providing bilingual, dual immersion, and other nontraditional public educational programs that support ELs in developing their home language skills in addition to English. However, charter schools have more work to do in outreaching to and enrolling ELs at rates proportional to traditional public schools. The charter school leaders we interviewed provided several examples of effective instructional, parent engagement, and recruitment strategies that we hope can be applied directly or serve as inspiration for furthering innovation at other charter and traditional public school sites throughout California.

Background

Over the past decade, California has faced a persistent achievement gap between EL students and their white, non-EL peers. Between 2005 and 2011, average Academic Performance Index (API) scores for EL students in all of California’s public schools, including charter and traditional public schools, ranged from 139 to 164 points lower than the average API scores for white students.⁷ Underscoring the importance of this issue is the fact that ELs comprise a large percentage of California’s student population. In 2014, the California Department of Education (CDE) reported that there are over 1.4 million (23%) public school students in California classified as ELs.

ELs face several barriers to success beyond those faced by their native English-speaking peers. They are expected to achieve proficiency in English as their second language, as well as in math, science, and other subjects taught in English (Maxwell-Jolly, 2011). ELs are often immigrants or the children of immigrants whose life circumstances disrupted their early childhood education (Ruiz-de-Velasco & Fix, 2000). Researchers have found that EL students generally do not have access to the instructional materials most appropriate to their needs, and are frequently taught by teachers who lack adequate training in instruction specific to EL students (Rumberger & Gándara, 2004). ELs have lower average test scores, higher high school dropout rates, and a lower chance of attending college than their native English-speaking peers (Callahan, 2005; Silver, Saunders, & Zarate, 2008; Gándara & Rumberger, 2007). These issues make it imperative that California’s schools undergo a thorough exploration of the best models that can be replicated to improve outcomes for EL students. A detailed exploration of the research literature highlighting EL identification, reclassification, self-selection and school recruitment practices can be found in Appendix B. This appendix also highlights research regarding ELs’ achievement in charter schools, schoolwide reforms and effective instructional models for bolstering EL academic success.

English Learners in Charter Schools Have Higher Levels of Academic Achievement

We analyzed several sources of achievement data, including the Academic Performance Index (API), Adequate Yearly Progress (AYP), Annual Measurable Achievement Objectives (AMAO), the California English Language Development Test (CELDT), and student-level data to explore trends in the achievement levels of ELs in charter and traditional public schools. **Our major finding was that ELs in California’s charter schools tend to outperform their traditional public school counterparts.** While some of the differences were modest, the consistency of this finding was striking. This finding was remarkably consistent and has remained relatively strong over the past four years. The outperformance of ELs in charters has been cited by other researchers, including a 2014 Stanford study that found ELs in California charter schools gained nearly 2 additional months of learning in English Language Arts and 2.5 months in math compared to their traditional public school EL peers (CREDO, 2014). This outperformance is also consistent across various types of charter schools, including in urban/rural settings and schools with varying levels of autonomy. For this reason, the data reported below is for all charters and not disaggregated by charter type (as we did to highlight differing enrollment trends by type of charter school).

Schoolwide Outcomes

School-level data was the most readily available source of achievement data for all schools. We looked at longitudinal EL outcomes on the API, AYP, and CELDT in charter and traditional public schools to determine whether charters and traditional public schools had different outcomes in aggregate. API and AYP outcomes are based on students’ results on the California Standards Tests (CSTs).⁸ AYP and CELDT results are particularly relevant due to their use in Title III funding accountability metrics and their inclusion as required components in reclassification criteria in California.⁹ We excluded Alternative School Accountability Model (ASAM) sites from our analysis, since they represent a wide spectrum of alternative and special education school sites whose achievement outcomes on these metrics are not generally comparable to mainstream schools and often have missing or incomplete performance data.

API Scores

Our analysis of EL API scores showed that charter EL students tended to outperform their traditional public counterparts year after year, as shown in Figure 8.¹⁰ It is important to note that these differences were relatively small, with the gap amounting to 19 points in 2012-13. What is worth noting is the consistency with which charter EL students have outperformed traditional public school ELs on the API.

There was a large number of missing EL API scores for charter schools until the 2010-11 school year, which was due to the subgroup requirements needed for a group of students to be considered large enough to warrant a separate API score.¹¹ In the 2010-11 school year, a number of new charters and growing charters reached significant EL subgroup sizes, which led to more charters having EL API scores in the most recent years.

FIGURE 8: Student-Weighted EL API Growth Scores in Charters and Traditional Public Schools, 2008-2009 through 2012-2013

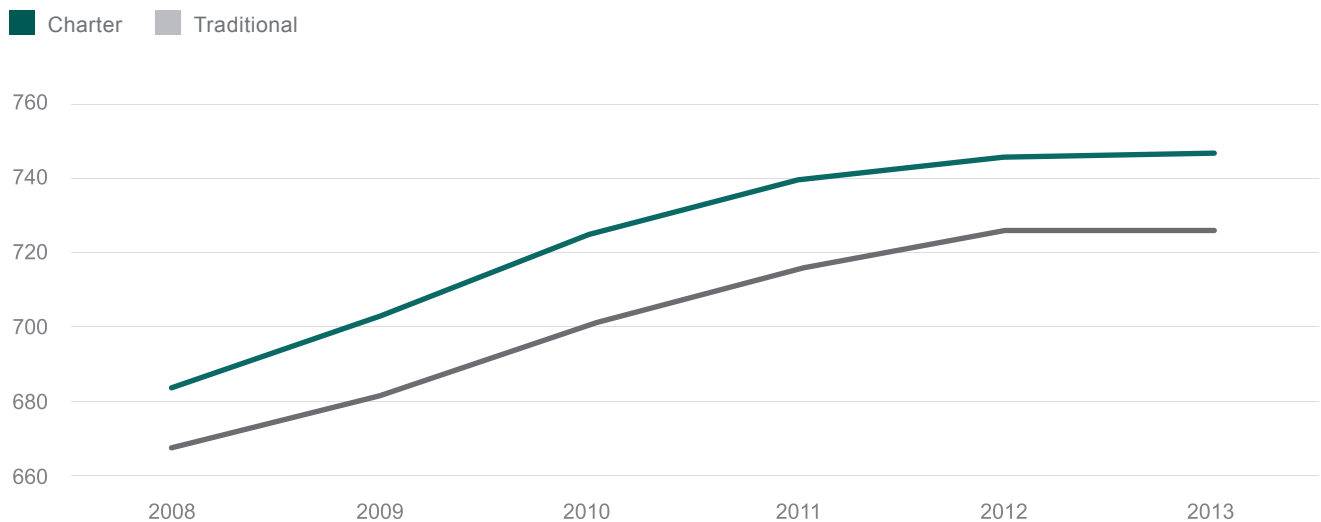
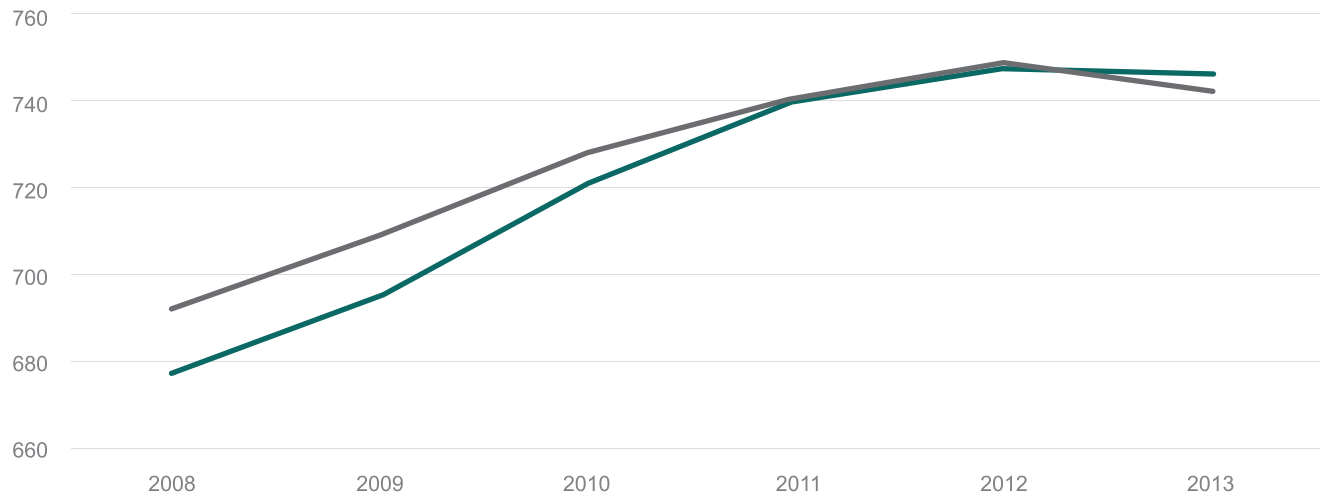


Figure 8 allows us to compare charter school students with traditional public school as if the whole state were a single school. That is a useful analysis to measure student gains and shows that charter school students outperform their traditional public school counterparts.

Another way to look at this data is to review the API score of EL subgroup at each school. This average will show us how schools are performing. This data shows us that in 2008, the EL subgroups at charter schools were, on average, lagging behind traditional public schools. However, by 2011, that gap had completely closed, and by 2013, the average charter school EL subgroup had a higher API that that same group at traditional schools.

FIGURE 9: Average EL API Growth Scores in Charters and Traditional Public Schools ■ Charter ■ Traditional



Clearly, charter schools have made gains in educating their EL students, and as shown later in this report, these gains have been made as charter schools have increased their enrollment of EL students by 2.6% since 2008, while traditional public schools have only increased their EL enrollment by 1.5% over the same period.

Similar Student Metrics

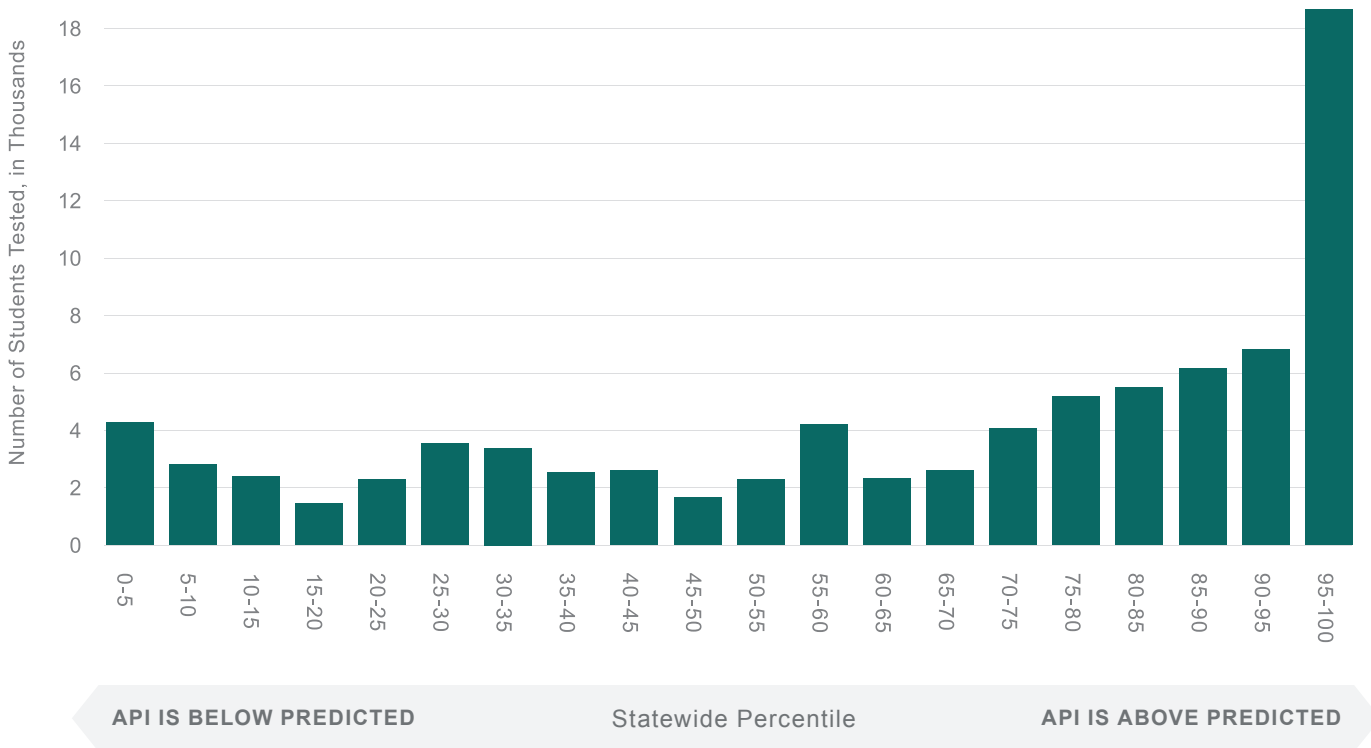
CCSA developed the Similar Students Measure to assess school performance while filtering out many of the non-school effects on student achievement. The process uses publicly available data and begins with each school’s Academic Performance Index (API) score and the demographic characteristics of each student tested at the school as reported by the California Department of Education. We then plug those API scores and demographics for each school (charter and traditional) into regression models.¹² The regressions then generate a “predicted API” score for each school. *(In other words, given the portfolio of students that your school served – the average parent education level, the mix of ethnicities, the percentage of low income students, etc. – here’s how the regression would predict your school to perform, given how all other schools in the state performed serving students with similar backgrounds.)*

We then compare each school’s actual API score to their predicted API. *(In other words, given your portfolio of students, are you outperforming how the regression would predict you to perform? If yes, great! If, however, the school is underperforming compared to how all other schools in the state perform with a similar mix of students, then this is a point of concern for us—particularly if this underperformance persists over multiple years and is*

coupled with a low overall API score and low growth over time.) Looking at actual vs. predicted scores, we create a “Percent Predicted API” ratio for each school. A school with actual and predicted API scores of 800 would have met 100% of its prediction. A school predicted to be at 800 but actually achieving a 960 API would be considered outperforming (120% of its prediction). Conversely, a school with the same 800 prediction but an actual API of 640 would be considered underperforming (achieving only 80% of its prediction).

The prevailing educational wisdom has been that student performance can be predicted by language, race and socioeconomic status. Charter schools have shown that students of ALL backgrounds can excel when given the appropriate opportunities, regardless of their demographics. Strikingly, as shown below, charter schools serving a majority of historically disadvantaged students are likely to be among the highest performing schools in the state (3 times more likely to be in the top tenth percentile and 5-6 times more likely to be in the top fifth percentile). Also encouraging is that these schools are not more likely than traditional public schools to be among the lowest performing schools in the state. These figures suggest that historically disadvantaged students have a much greater likelihood of academic success in a charter school than in a traditional public school.

FIGURE 10: Charter Schools Serving Majority of English Learners, Percent Predicted API 2013



Percent Predicted API

Demographics			Bottom 5%	Bottom 10%	Top 10%	Top 5%
English Learners Students	Charter	%	5%	8%	30%	22%
		#	3,833	6,367	22,840	16,697
	Traditional	%	5%	10%	10%	4%
		#	60,895	128,225	131,355	55,078

These data show that charter schools with high EL populations are strongly outperforming other schools with similar student demographics. For more detail on this measure, refer to CCSA's Portrait of the Movement report.¹³

Proficiency Rates

An analysis of EL student proficiency rates in English Language Arts (ELA) and Math on AYP also showed that charter school ELs consistently outperformed those at traditional public schools, though the differences were small. Figures 11 and 12 highlight trends in the percentages of EL students proficient or above in ELA and math from 2008-09 through 2011-12 in charter and traditional public schools.¹⁴ Charter EL outcomes were slightly higher than traditional public EL outcomes each year. In 2011-12, charter schools had three percent more ELs proficient or above in ELA than traditional public schools (44% vs. 41%) and two percent more in math (52% vs. 50%). Similar to our API findings, what is striking here is not necessarily the size of the difference between charters and traditional public schools, but rather the consistency with which charter schools have maintained higher outcomes with their EL students.

FIGURE 11: ELs Proficient or Above in ELA, 2008-2009 through 2012-2013

■ Charter ■ Traditional

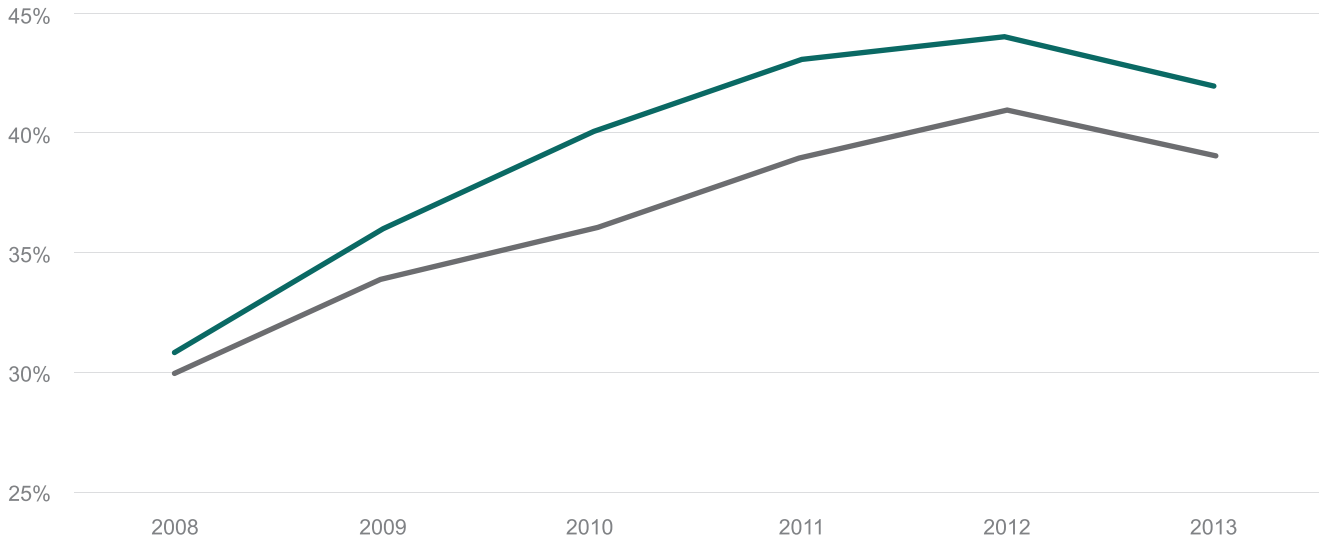
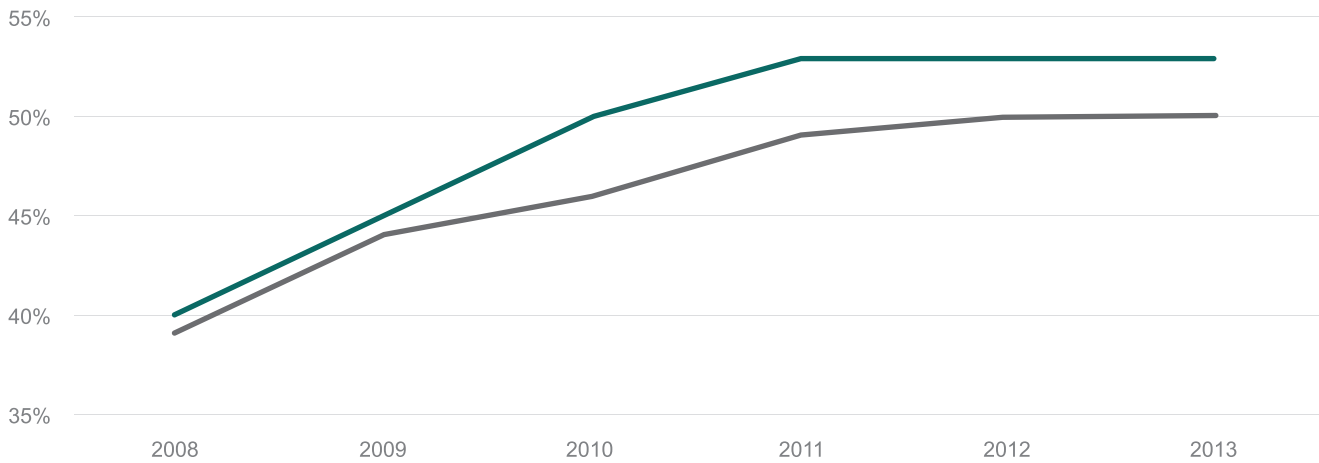


FIGURE 12: ELs Proficient or Above in Math, 2008-2009 through 2012-2013

■ Charter ■ Traditional



Value-Added Analysis

Measuring individual student growth over time using regressions to control for prior achievement is an important and more precise assessment of school performance than that which is currently publicly available statewide. For this study, we were able to access and analyze student-level data for EL students in Los Angeles Unified, in a large California urban school district.¹⁵ We compared EL student achievement outcomes of LAUSD traditional public schools with charter schools participating in CCSA's Zoom! Data Source program.¹⁶ The traditional public school sample was therefore limited to a specific geographic area, while our charter school sample was distributed throughout the state and represented charter schools that chose to use CCSA's data management system. Although these facts limit our ability to compare student outcomes, these data sources represent the extent to which we were able to access large enough sample sizes of EL students in order to run robust statistical tests on the data.

We calculated the value add of a sample of charter schools on EL achievement compared to traditional public schools in a large urban district. We found that:

- The charter schools achieved higher levels of growth with their EL students in ELA and math than did traditional public schools.
- Long-term ELs, or those who had been ELs for more than five years, experienced even higher rates of growth at charter schools than did short-term ELs.
- In terms of closing the achievement gap, charter schools showed higher levels of academic growth with EL students than with non-ELs compared to traditional public schools.

This indicates that the charter schools in our sample were closing the achievement gap with ELs at a faster rate than were the traditional public schools.¹⁷

English Learner Enrollment at Charter Schools Varies Widely

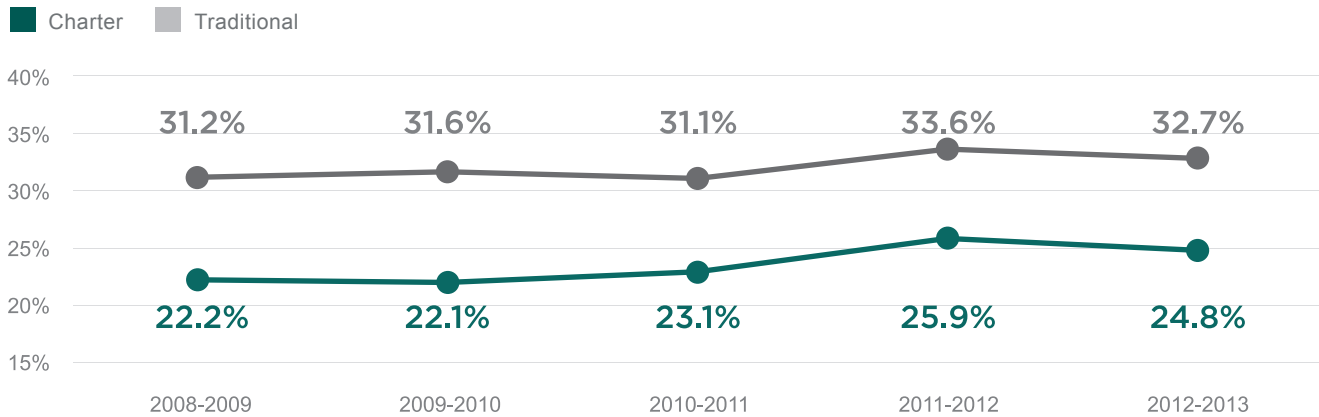
When looking at statewide averages for enrollment we find that charter schools enroll 8% fewer EL students when compared to traditional public schools. Although the statewide averages are lower, that data appears to mask the extreme levels of variation amongst charter schools throughout the state. When we look at urban and suburban charter schools, the difference is only 2% compared to their urban and suburban traditional public school counterparts. Strikingly, the largest difference is in rural charter schools. These schools enroll over 11% fewer ELs when compared to rural traditional schools.

These findings suggest that some types of charter schools may have more work to do in recruiting EL students into charter schools (particularly rural and non-autonomous charters as described in more detail below). Language minority communities may be difficult to connect with for new charter schools, which may be understaffed or rapidly attempting to grow enrollments in the first few years. Several charter school leaders noted that their recruitment practices relied heavily on word of mouth and relationships born out of the first cohort of families. School districts have arguably the most direct lines of communication to parents, but may not effectively advertise the charter school options available. A CCSA survey of 800 voters in California in 2012 validated this, revealing that respondents' top choices for information about charters schools were friends (30.2%) and their local school district (26.9%).¹⁸ All of these challenges may result in the lower enrollments of EL students in charter schools that are reported below. This is an issue that warrants further research and exploration into the reasons for lower enrollments, particularly at rural and nonclassroom-based schools.

Statewide Enrollment

Figure 13 highlights the persistence of this finding over five school years, from 2008-09 through 2012-13. On average statewide, EL student enrollments have been 8.4% lower at charter schools than at traditional public schools over the past five testing cycles. This dataset presents some limitations, since it only accounts for students that were tested in grades 2 through 11, and includes some recently reclassified EL students that have not reached proficiency in English Language Arts (ELA).¹⁹ However, the findings here were mirrored closely in other sources of EL enrollment data. The charter-traditional public school gap in EL enrollment has narrowed slightly over time (from 9% in 2008-09 to 7.9% in 2012-13).²⁰

FIGURE 13: EL Students Included in the API Excluding ASAM, 2008-2009 through 2012-2013 ²¹



On average, charter schools have narrowed the gap over time from 9% fewer EL's in 2008-2009 to under 8% in 2012-2013.

All Schools, Excluding ASAM		2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Charter	# EL Students	46,251	51,744	59,020	69,559	76,817
	Total # Students Tested	207,989	234,177	255,020	268,649	309,739
	Schools with Data	644	727	804	886	969
Traditional Public	# EL Students	1,365,801	1,369,856	1,345,408	1,354,683	1,308,909
	Total # Students Tested	4,376,979	4,341,770	4,324,638	4,026,706	3,998,725
	Schools with Data	7,595	7,628	7,690	7,693	7,672

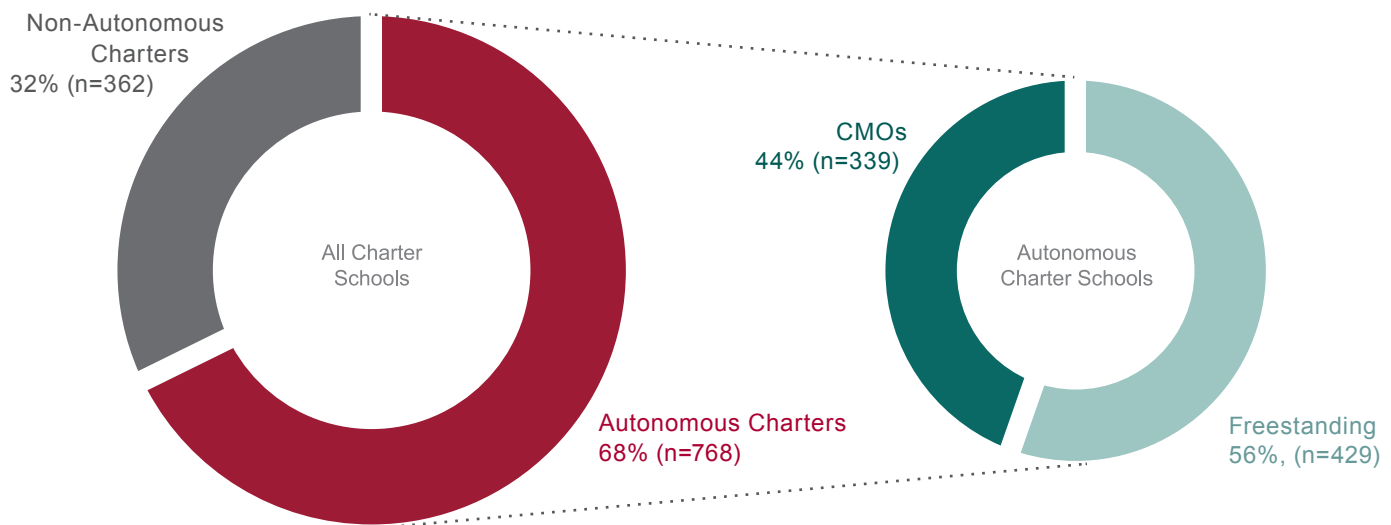
The table associated with Figure 13 highlights the growth trajectory of charter school enrollment in the state. During this five-year period, the percentage of ELs in all California public schools increased and hundreds of new charter schools opened. As the number of charter schools increased, the percentage of ELs in charter schools tended to catch up slightly with traditional public schools. This is a promising indication that charter schools may be increasing their enrollments of ELs, although more work has to be done to achieve equal levels of EL enrollment between charter and traditional public schools.

Enrollment by Type of Charter School: Levels of Autonomy, Classroom Setting, and Urban/Rural Differences

California charter schools represent a wide diversity of school types, with varying levels of autonomy, differing governance structures, and classroom settings (including many nonclassroom-based and blended learning schools). As shown in Figure 14, more than two thirds of California’s charters (68%) are autonomous or semi-autonomous. Autonomous schools are those that appoint their board of directors, do not use their district’s collective bargaining agreement and are directly funded by the state. Non-autonomous charters however, are those schools that have the majority of their board appointed by their authorizer or are under a school district’s collective bargaining agreement and receive their funding indirectly from the state. Semi-autonomous charters have some aspects of each category (see Appendix A for full definitions).

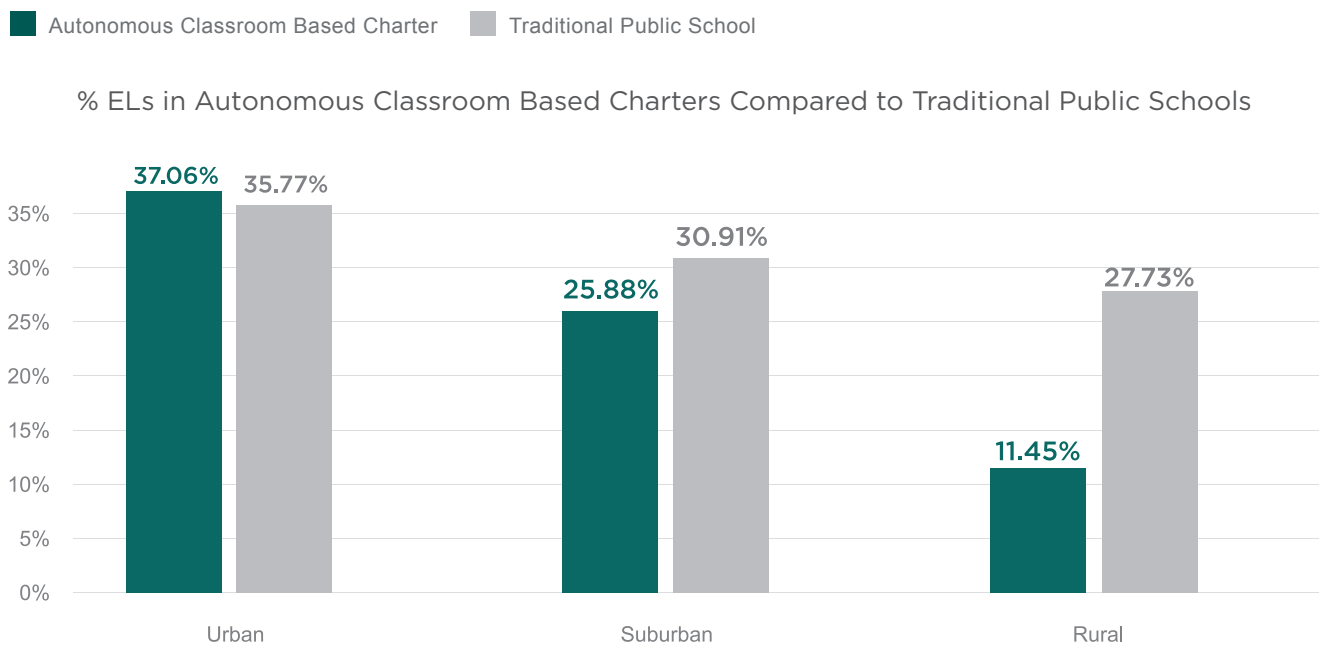
Another key differentiating factor is classroom setting. Nonclassroom-based charter schools (which are typically independent study charter schools but which also include a small number of combination independent study/classroom-based schools) make up 22% of California charters and 21% of the autonomous charters (168 out of 811 charter schools as of 2013-14). There are a wide variety of nonclassroom-based schools, including a small percentage of virtual schools (27 schools). However most are schools where students attend class at least a few times per week but where less than 80% of instruction occurs at the school site.

FIGURE 14: Percent of Charter Schools by Autonomy and Management Model, 2013-2014
(n=1130 total charter schools)



For the enrollment analyses included in this report, we disaggregate both levels of autonomy and classroom settings because they represent such differing levels of EL enrollment. Specifically, we see that autonomous, classroom based charter schools (which make up the majority of California charter schools) have closed the gap in EL enrollments in urban areas. EL's in traditional schools make up 36% of all enrollments, while in urban autonomous charters, over 37% of students are EL's. There is however, still a gap in suburban and rural EL enrollments.²² For more detail, see Appendix D.²³

FIGURE 15: Autonomous Charter School and Traditional Public School % EL Enrollment by Urbanicity



All Schools, Excluding ASAM		Urban	Suburban	Rural
Autonomous Classroom-Based Charters	# EL Students	38,242	12,919	358
	Total # Students Tested	103,194	49,920	3,127
	Schools with Data	344	157	25
Traditional Public Schools	# EL Students	592,797	661,647	60,132
	Total # Students Tested	1,657,187	2,140,898	216,884
	Schools with Data	3,183	4,131	835

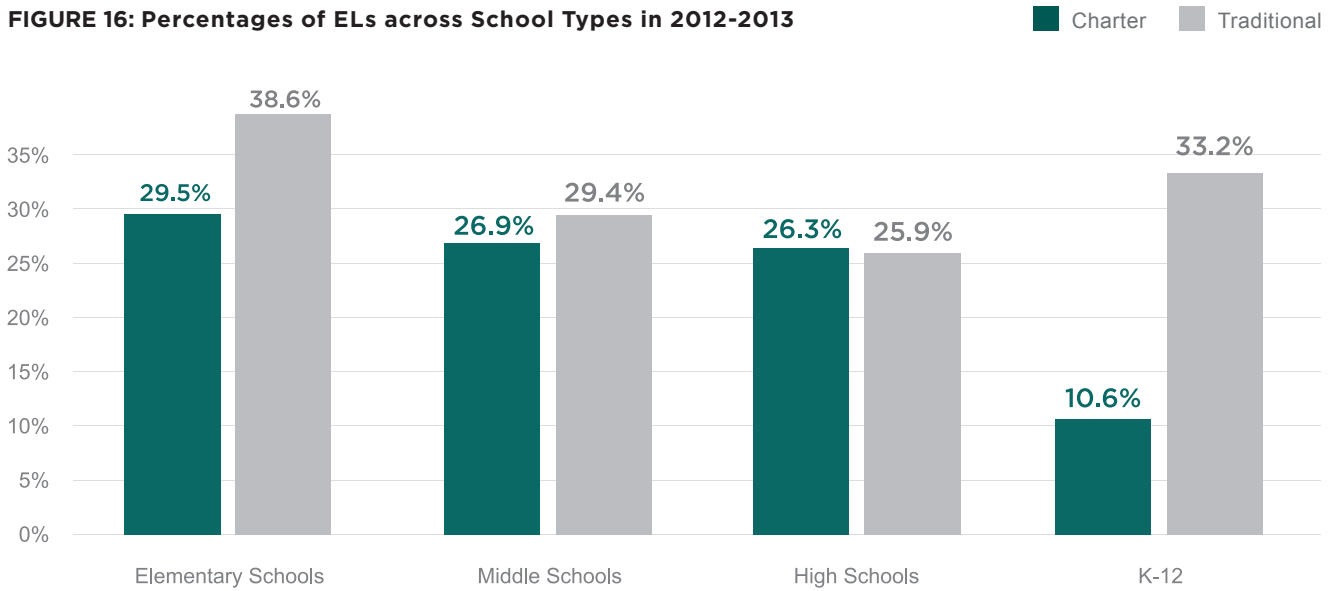
When we compare urban, autonomous, classroom-based charter schools to urban traditional public schools we see the charter EL enrollments exceeding that of traditional schools, as highlighted in Figure 15 (37.06% ELs in the urban charters compared to 35.77% ELs at urban traditional public schools). Suburban autonomous classroom-based charters also showed a 5% lower enrollment of ELs compared to suburban traditional public schools (25.88% ELs in suburban charters compared to 30.91% ELs in the suburban traditional public schools).

This same analysis would suggest that rural charter schools, particularly nonclassroom-based rural charters, are a main driver of the EL enrollment discrepancy statewide. Rural autonomous classroom-based charter schools have EL enrollments of 11.45% compared to rural traditional public schools, which have EL enrollments of 27.73%. When we look at rural autonomous nonclassroom-based charter schools we see an even lower rates of EL enrollment, with these charters having EL enrollments of only 3.7%. Together, rural autonomous classroom-based and nonclassroom-based charters make up 25% of all charters in California. It is important to note that the more appropriate comparison for nonclassroom-based charter schools would be nonclassroom-based traditional public schools, but currently that data is unavailable.²⁴

Enrollment by Grade Level

Splitting the data by grade span illuminated some trends in the data that may be driving lower percentages of ELs at charter schools at the statewide level. Figure 16 shows percentages of ELs across elementary, middle, and high schools, with charter schools displaying similar percentages of EL students compared to traditional public schools at the middle and high school levels. The small percentage of K-12 schools in the data set (11% of all charters and 0.5% of all traditionals) have the largest EL enrollment differences.²⁵ With the sheer number of elementary schools and the students represented in those schools, it is clear from the distribution that lower percentages at the elementary school level are also driving much of the disparity statewide.

FIGURE 16: Percentages of ELs across School Types in 2012-2013



* Note: The small number of traditional public K-12 schools does not make a robust comparison with charter K-12 schools possible. See note below for more details.

All Schools, Excluding ASAM		Elementary	Middle	High School	K-12
Charter Schools	# EL Students	35,752	14,428	20,648	5,989
	Total # Students Tested	121,286	53,677	78,518	56,258
	Schools with Data	473	133	256	107
Traditional Public Schools	# EL Students	727,445	272,967	304,994	3,503
	Total # Students Tested	1,883,228	928,003	1,176,951	10,543
	Schools with Data	5,228	1,219	1,186	39

Note: K-12 schools represent 11% of charter schools and 0.5% of traditionals among non-ASAM schools in this dataset. The small number of traditional public K-12 schools does not make a robust comparison with charter K-12 schools possible. It is important to note that the majority of K-12 schools are rural and/or nonclassroom-based, thus aligning with other EL enrollment trends cited in this report. Specifically, 81% of K-12 charter schools are non-classroom based (and 6% of all K-12 charters are virtual schools). In contrast, 22% of all charters are nonclassroom-based (0.9% of all charters are virtual). Further, 19% of all K-12 charter schools are rural compared to 9% of all charters.

There are several reasons why these differences could exist, including reclassification criteria and practices, initial identification of students, as well as recruitment. We will explore these hypotheses in the next section of the report.

While the majority of the analyses in this report are based on API data files (the only files that were available for multiple years to assess longitudinal performance trends), we also conducted a one-year analysis using the Language Census data files. This dataset does not include student outcome data and is not as robust so we do not rely on it throughout the report but it does provide a more detailed view of the grade-level differences. We compared each charter school to its district as a whole to understand differences in EL enrollment by grade level and found that the biggest disparities were in grades 2 and 3. We do see a similar trend that the gap in EL enrollments between charter and traditional public schools is largest in elementary schools and narrows at the middle and high school levels.

FIGURE 17: Differences in Percentages of ELs at Charter and Traditional Public Schools of the District, 2013-2014

Comparisons (Charter % of ELs Minus District Traditional Public Schools' % of ELs)	All Charters with Enrollment Data	Difference Between Charter and Schools in their District in % of ELs
All Charters	1030	-6.8%
Kindergarten	452	-9.47%
1st Grade	472	-8.97%
2nd Grade	489	-11.25%
3rd Grade	458	-11.31%
4th Grade	443	-9.05%
5th Grade	432	-7.07%
6th Grade	425	-4.64%
7th Grade	406	-4.99%
8th Grade	378	-5.4%
9th Grade	327	-1.22%
10th Grade	326	-2.38%
11th Grade	315	-2.87%
12th Grade	309	-0.99%

The fact that the EL enrollment gap is largest at the elementary level and smallest at the high school level is particularly noteworthy given the disproportionate percentage of charter high schools in California. As noted in Figure 18 below, charter schools are more likely to be high schools than traditional public schools (28% of all California charter schools are classified as high schools compared to 23% of all traditional public schools). Conversely, traditional public schools are disproportionately elementary schools (60% of traditional public schools as compared to only 46% of charter schools).²⁶

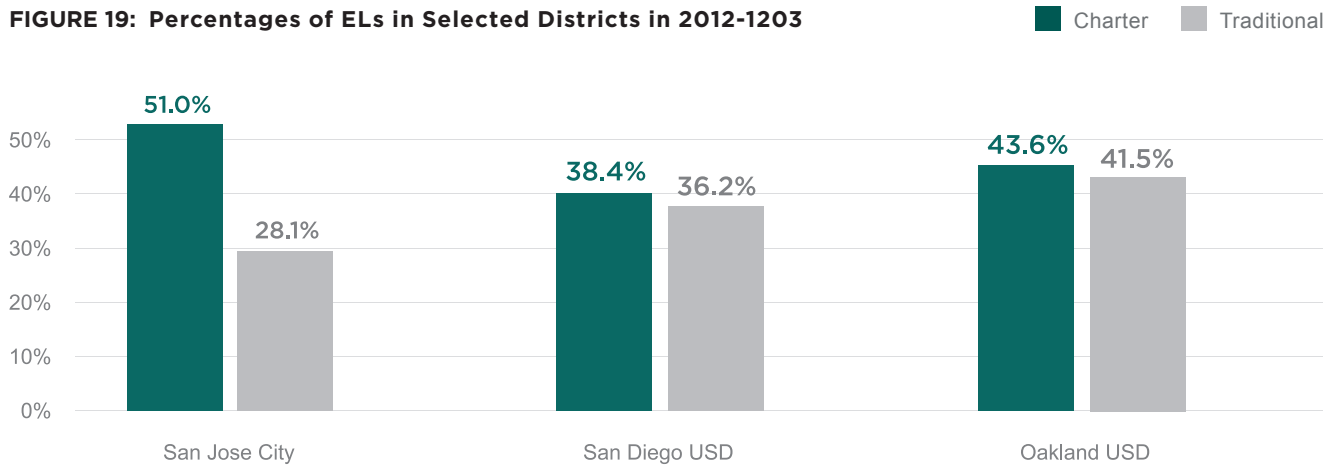
FIGURE 18: Percent of Total California Charters and Traditional Public Schools by Grade Level, 2013-2014

	Elementary	Middle	High	Other - K-12
Charter Schools	46%	12%	28%	13%
Traditional Public Schools	60%	14%	23%	3%

Enrollment by Region

The enrollments of ELs at charter and traditional public schools showed some variation when the data was disaggregated by geographic region. For instance, charter schools had higher percentages of EL students than traditional public schools in the city of San Jose. Figure 19 shows the percentage of students tested that were ELs in three regions where percentages were similar at charter and traditional public schools, or higher at charters: Oakland Unified School District, San Diego Unified School District, and San Jose City.²⁷ These three regions represent some of the most charter-dense areas of the state, with San Diego being the second-largest authorizer of charters in California, and Oakland and San Jose having a fourth of all students enrolled in charters as of 2014-15.

FIGURE 19: Percentages of ELs in Selected Districts in 2012-1203

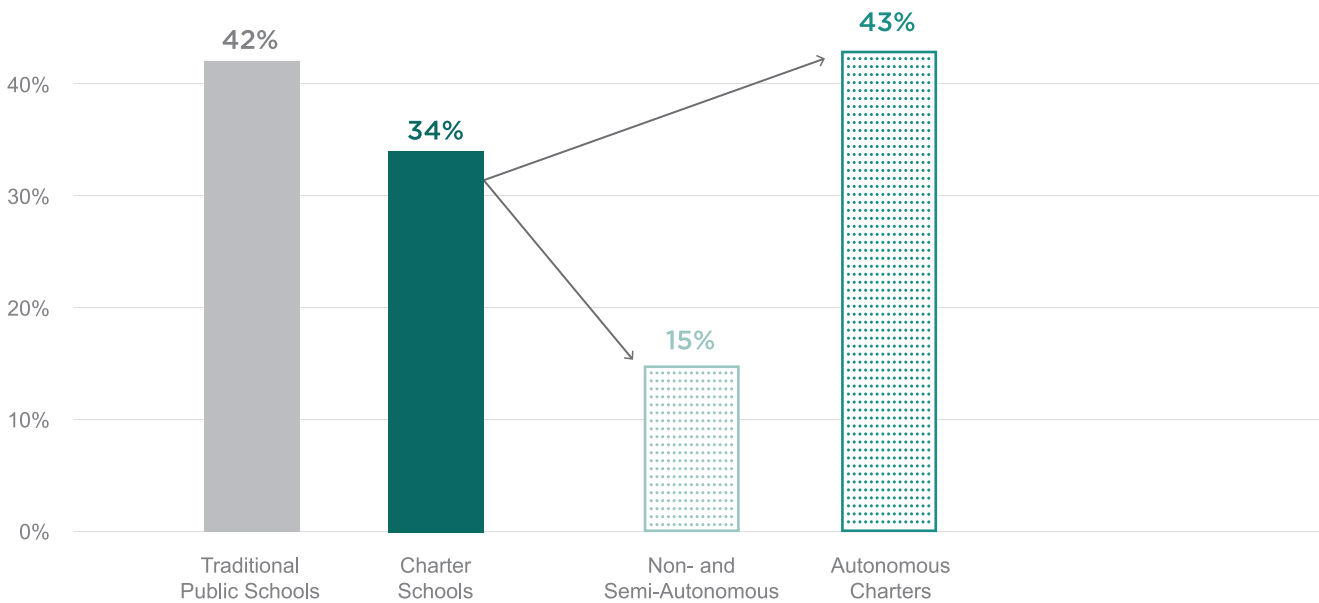


All Schools, Excluding ASAM		San Jose	San Diego	Oakland
Charter Schools	# EL Students	1,070	4,418	3,779
	Total # Students Tested	2,096	11,493	8,662
	Schools with Data	8	42	38
Traditional Public Schools	# EL Students	7,512	27,816	9,770
	Total # Students Tested	26,739	76,797	23,540
	Schools with Data	47	173	80

EL enrollment in California’s largest district, Los Angeles Unified School District (LAUSD), was 41.7% of tested students in its traditional public schools and 34.0% in its charter schools in 2012-13. This 8% difference masked a nuance in the data: LAUSD autonomous charter schools enrolled higher percentages of ELs than non-autonomous charter schools. Once we accounted for this difference, that deficit became a **1% surplus**. ELs at autonomous charter schools serve a slightly higher percentage of ELs than LAUSD’s traditional public schools. (Note that autonomous charter schools represented nearly 80% of all charter schools in LAUSD in 2012-13).

Figure 20 shows that ELs comprised only 15% of the tested population of semi- and non-autonomous charters, whereas they made up 43% of the tested population at autonomous charter schools. These findings further support the analysis of urban, classroom-based, autonomous charters discussed earlier, since all LAUSD charters in this analysis were classroom-based. The local geographic analysis also showed a narrowing of the gap in EL enrollments once we isolated autonomous charters in LAUSD.²⁸

FIGURE 20: Percentage of ELs in Los Angeles Unified School District by Autonomy, 2012-2013



School Type	Autonomy Status	Data Comparison	Total
Charter	Autonomous	English Learner N (% of Tested Students)	26,145 (43%)
		School N (% of LAUSD Charters)	184 (79%)
	Semi- and Non-Autonomous	English Learner N (% of Tested Students)	4,155 (15%)
		School N (% of LAUSD Charters)	49 (21%)
	Total	English Learner N (% of Tested Students)	30,300 (34%)
		School N (% of LAUSD Charters)	233 (100%)
Traditional Public	Total	English Learner N (% of Tested Students)	153,240 (42%)
		School N (% of LAUSD Traditional Public Schools)	662 (100%)

Why the Differences in English Learner Enrollments? A Testing of Three Hypotheses

Various data files present different pictures of the gap between charter and traditional public school EL enrollment. Different disaggregations (by charter type, urban-rural, grade level and region) show varying sizes in the gap (with the gap closed in some instances). In this section, we test possible theories of, when it does exist, why is the gap happening? The hypotheses were:

1. Charter schools may reclassify students at a higher rate than traditional public schools, thereby resulting in lower percentages of EL students.
2. Charter schools may not identify students as ELs to the same degree as traditional public schools.
3. Charter schools may not recruit EL students effectively enough to enroll similar percentages as traditional public schools.

Each of the three theories were explored to a limited extent using enrollment data and interview results, and we were only able to find evidence supporting the third hypothesis, though additional research is needed on the first two to be able to prove or disprove those with certainty.

Reclassification

Reclassification of EL students to Fluent-English Proficient (RFEP) status is difficult to measure, since districts and charter schools have flexibility in determining their reclassification criteria.²⁹ From our interviews, seven school leaders stated that they used their authorizer's reclassification criteria, while another four had their own criteria for reclassification. Therefore, an EL that is reclassified at one school could have taken more or less time to reclassify at a different school. We used grade-level EL enrollment data from CBEDS to compare percentages of ELs enrolled at charter and traditional schools. The general trends are the difference between charter and traditional school enrollment peaks at grade 3. Typical reclassification procedures would require a student to be proficient or above on CST ELA test for two years before being reclassified. If charters and traditional schools were reclassifying at the same rate, we would expect that difference to remain constant. What we see in the data is that from 3rd grade at the peak, we have a difference of 11.31%, but by 6th grade, that difference has been reduced to 4.64%, a reduction of almost two-thirds.

This reduction could be caused by a few different enrollment trends. One possible cause for this pattern of enrollment is that charter schools reclassify at a lower rate than the district schools. Although we were unable to test this hypothesis because each district school and charter school has its own reclassification criteria, our analysis of academic performance data show that charter EL students perform better on the CST's and because most reclassification criteria have been based on CST performance, it is unlikely that charters would reclassify at a lower rate. Additional data and research are needed on this topic in order to address our hypothesis.

More likely than a lower reclassification rate, a better explanation is that charter schools enroll more EL students in at grade 4 and higher. These students could have left the traditional public schools in upper elementary and moved to charter schools. This hypothesis would suggest that parents move their students who have been unsuccessful at a traditional school into a charter school in the upper elementary grades, thus reducing the percentage of EL's in traditional schools and increasing the percentage of EL's in charter schools. This would have the effect of shrinking the gap between the two school types. In order to test this hypothesis, we would need student level enrollment data to measure student enrollment patterns. Unfortunately, that data is not available from the state.

Identification

In order to assess the hypothesis that charters may have lower EL identification rates, we asked charter school leaders about their level of confidence in the results of the Home Language Survey.³⁰ Schools use the Home Language Survey as a primary tool to determine EL designation eligibility. Parents take the survey, which asks four questions about their child's primary language. The answers to the survey determine whether or not a child is given the California English Language Development Test (CELDT), the results of which identify ELs.³¹ During our interviews with school leaders, we asked directly if school leaders thought there were parents that identified their children as English-only, when in fact their students were likely ELs. Ten school leaders stated that they believed some parents purposefully answered the survey incorrectly. Nine of these school leaders suggested that parents wanted to preclude their children from being identified as ELs. However, three school leaders stated that they believe this is also prevalent in traditional public schools. Two dual immersion school leaders claimed that parents were as likely to misidentify their children as English-only speakers as they were to misidentify their children as ELs. Parents might label their child as a Spanish-speaker, for example, if they thought that their child would have a better chance of being admitted to the dual immersion program. While it is clear that several charter school leaders do not fully trust the results of the Home Language Survey, we cannot state with confidence that this is a contributing factor to lower EL enrollments at charter schools. Additional data and research are needed on this topic in order to address our hypothesis.

Recruitment: Challenges and Best Practices

Our third hypothesis appears to be supported by our interview data in explaining low EL enrollments at charter schools. When asked for their opinion, the charter leaders we interviewed did not cite reclassification or identification as the primary reasons for lower percentages of ELs in charters. The majority said that efforts to increase the numbers of ELs in charters should focus on recruitment. They outlined specific challenges faced in the recruitment of ELs and suggested some best practices for enhancing EL enrollment.

Challenges Faced in Recruitment of English Learners

Eight school leaders spoke about a lack of accurate information and misperceptions that may be impacting EL parents who would otherwise be interested in applying to a charter school. This means that EL parents may be less likely to enroll in charter schools, even if there are not tangible barriers to enrollment, due to misinformation about charter schools or a lack of understanding about the application process. Six school leaders suggested that parent misinformation about charter schools in particular is a likely source of lower enrollments. School leaders each gave several examples of misperceptions, but spoke about four common ones in particular. Parents of EL students may **mistakenly** believe that:

- Charters are private schools
- Charters have admissions criteria
- Information provided on application forms could be used to check immigration status
- Charters don't accept EL students

One school leader referred to the general lack of information on charter schools reaching parents as a primary source of misunderstanding: “Unless they’re connected through a family or friend they think [our school] is a private academy.” This school leader specifically noted that parents did not receive sufficient information about public school options from their local school district, and as a result believed that charter schools in their area were private schools. Another described the impact that a misunderstanding could have: “Believing that any charter school is a private school potentially discourages parents without financial means from inquiring about a school, let alone applying. The mistaken belief that there are admissions criteria could also be intimidating, particularly for parents of underserved students, if they do not have a record of high achievement.” One school leader stated that parents have inquired about admissions criteria in the past, while another recommended charter schools be sure to exclude any questions about academic history from their applications processes: “Every application that goes into the lottery needs to only have basic information or to have certain conversations [about students’ needs]. [Academic history information] could still be gathered after the lottery.”

Parents may additionally be turned off by charter school applications that require information about student or family background, particularly if a family member is experiencing complications related to immigration status. In some cases, charter leaders reported that parents have been intimidated by district teachers or teachers' unions that have spread misinformation about charter schools. Two school leaders described instances where parents were misinformed through flyers or word of mouth that they could be deported as a result of the information provided on a charter school application. Other school leaders noted that immigrant parents may choose their default traditional public school because the registration process provides relative anonymity. We heard stories from school leaders of deportations occurring in some students' homes, and it is not surprising that some parents may be risk averse when providing personal information to public entities.

There was also a sense from some interviewees that parents may not expect charter schools to be fully inclusive: "[There's a] misperception by some parents that charters are not for special education or EL students." One school leader said, "Many of our families have students at the district schools for elementary, and they called asking us if we really take ELs." Any misimpression that charter schools are not fully inclusive of all students would potentially impact the level of interest from EL parents and is a misperception charter schools should continue to work hard to address.

Best Practices in Recruitment Identified by Schools with High English Learner Populations

The charter leaders we interviewed noted specific successful practices they employed and recommendations they would give to other schools to increase their proportion of ELs. In particular, they noted:

1. The importance of leveraging strong community relationships
2. The need for proactive, assertive recruitment efforts focused on non-English speaking families, including multilingual outreach
3. The importance of word of mouth and school location

Building strong community relationships was mentioned by six school leaders as an important factor in recruiting EL students. Some spoke generally about interacting with residents in immigrant or other potentially non-English dominant communities to build support and spread knowledge of a school. One school leader suggested, "Going into communities, door knocking, going to libraries, community centers, and the neighborhoods where those [EL] families are at, that's where charters need to go." Another school leader noted the importance of building community support from a variety of residents: "[We] want our local businesses, the local dentist, to say 'that's a great school.'" Building relationships in the local community was generally discussed in tandem with recruitment efforts often being supported by word of mouth between relatives, friends, or through public networks. One school leader said that building relationships with local feeder school counselors was most effective for

getting applications from EL students. The school leader worked for several years to build trust with local school counselors in order to ensure that the parents of ELs or other underserved students were informed about the opportunities at her charter school.

Six school leaders mentioned **proactive recruitment** as a vital factor in attracting parents of EL students. Some spoke specifically about ensuring that informational materials are translated into the home language of prospective parents. One school leader noted that if charter school leaders do not recruit aggressively after reaching capacity and rely primarily on word of mouth to attract new students, it is likely that the initial cohort of families will have a large influence on future student populations.

Eight school leaders pointed to their success with **multilingual outreach** in recruiting ELs. At the schools where high EL enrollments were attributed to multilingual outreach, the most common method for attracting potential applicants was to provide informational materials in the language of parents. Recruitment materials were most often produced in Spanish, but at some schools additional languages were being considered for inclusion in school communications, such as indigenous Latin American languages or South Asian languages. These school leaders expressed sensitivity to the changing dynamics of local communities and a desire to reach as many parents as possible.

School leaders also pointed to targeted marketing campaigns and walking door-to-door. One high school leader described an impressive process where demographics data is requested from the local district for all matriculating 8th grade students. Although the school is oversubscribed and holds a lottery, the pool of applications is reviewed in advance of holding the lottery and analyzed to ensure that it is representative of the district. If there are gaps, such as a low percentage of EL students, parents in the target communities are asked to recruit other parents in order to fill the gap.

Word of mouth was a primary recruitment method that schools credited for their high EL enrollment (13 out of 18 leaders). We noted a pattern amongst schools that relied on word of mouth, with the founding cohort of parents setting the foundation for future enrollments. As one school leader described this process, “Our founding group had a lot of ELs and then it spread from there, family member to family member.” One school offers t-shirts as rewards to parents that recruit new students.

Six school leaders said that the **location of their school** was pivotal in attracting families of EL students, with one school leader stating that 90% of students lived within a mile of the school site. While not all of the participants were able to achieve the same level of local impact, all six emphasized a commitment to serving a predominately local or neighborhood population. In one example of creatively targeting a local population, a school using its proximity to a clothing manufacturing district to attract the mostly EL parents who worked nearby and could drop off their children at the school on the way to work.

Innovative Practices with English Learner Students Lead to Success

For our interview analysis, we selected 18 charter schools that had above-average EL enrollments and above-average EL API scores. We asked them a variety of questions about how their school missions, instructional designs, recruitment strategies, and parent outreach tied into the success of their EL students. The school leaders reported a variety of practices, but surprisingly there was a fair amount of overlap in responses, pointing to a relative consensus on the broad strategies that are most impactful. In terms of instruction, school leaders described the use of several research-based techniques implemented with a high level of fidelity and in results-oriented collaborative school environments. In fact, many of the strategies reported by school leaders were recommended in the Institute of Education Science's 2007 guide to effective EL instructional practices.³² We also found several resources at the U.S. Department of Education's Office for Civil Rights, which also describe some of the best practices identified below.³³

In order to zero in on the best practices charter schools use for serving EL students, CCSA used enrollment and achievement data to identify a diverse mix of schools that had two factors in common – above-average enrollments of EL students and above-average EL API scores. CCSA used several datasets to inform the selection process for our school leader interviews. We looked specifically at EL API scores and the percent of EL student enrollment in order to identify charter schools that had above-average EL API scores and EL enrollments. We purposefully sought out a diverse mix of schools to participate in the study, including Charter Management Organizations (CMOs) as well as single-site and dual immersion charters.³⁴ We ultimately included 18 charter schools in our interview analysis and were able to visit 12 of these schools to observe school environments and classroom instruction. The vast majority of the schools included were elementary schools because across all schools, both traditional public and charter, EL enrollments are lower at the middle and high school level as students are reclassified out of EL status into being designated as proficient in English. The elementary school level provided the best opportunity to study schools with majority EL student populations. Figure 21 provides summary statistics of the 18 schools included in our interview analysis.

FIGURE 21: Summary Statistics of 18 Charter Schools Included in Interview Analysis, 2011-2012 API Data ³⁵

School Characteristics	# of Schools	% of Schools
Elementary	15	83%
Middle	1	6%
High	2	11%
Dual Immersion	4	22%
CMO	10	56%
Total	18	100%

Figure 22 shows that two-thirds of students included in the API for 2011-12 across the 18 schools were ELs, compared to a statewide average of 38% of elementary school students. The average EL subgroup API score of 827 placed our selected charters in the 83rd percentile of all schools in California, which had an average EL API score of 716. Overall, the 18 schools represented a subset of charters in California enrolling relatively high percentages of ELs while simultaneously showing above average EL achievement outcomes.

FIGURE 22: Percentage of ELs and Average EL API Score in Interviewed Charters, 2011-2012

Key Factors	State Average	Average for 18 Schools
% of EL Students	38%	66%
EL API Score	716	827

Mission and Vision

How does your school's mission relate to the achievement of your EL students? Please complete the following sentence: "we believe we are successful as a school when our EL students can..."

We started our interviews by asking school leaders how they thought their schools' missions related to the achievement of their EL students. School leaders most often touched on four topics, stating that their schools' missions were:

- Inclusive of all students
- Focused on students developing language mastery
- Geared towards a goal of college readiness for all students, regardless of EL designation
- Supportive of bilingual literacy

Ten out of 18 school leaders stated that their schools serve all students equally and they do not distinguish between ELs and non-ELs when setting their vision and goals. In some cases, this was due to ELs comprising the majority of the student body. One school leader explained, "We don't filter them out [for setting vision and goals] since ELs are the majority. We want the same for all our students." Other leaders simply stated firmly that their expectations were similar for all students regardless of EL designation: "We wouldn't expect anything different from ELs than from our students who are English-only. Seven school leaders stated that they expect EL students to achieve language mastery, meaning that their schools' missions were tied to helping ELs develop their language skills and reach proficiency. We anticipated that this answer would be common, but it was clearly neither the most popular nor the only response that was repeated among school leaders. Six school leaders stated that their goals include a college-ready objective for all students, regardless of EL designation. Interestingly, none of these six schools were high schools, but rather were elementary or middle schools. This indicates a goal-setting process that recognizes long-term education outcomes as a priority over immediate goals such as matriculation. One elementary school leader stated that her school's goal was that "all kids graduate prepared for college success." A goal of bilingual literacy or at least developing an appreciation for dual language mastery was stated as a goal by five school leaders (three of which operate dual immersion programs).

Instructional Practice

To what do you attribute the level of achievement of your ELs?

Since the schools we selected had above-average EL academic outcomes, we asked school leaders how they were able to produce these outcomes with their EL students. School leaders touched on a wide variety of instructional guidelines, strategies, and practices that they thought were most effective in raising the achievement levels of their EL students. The most commonly cited practices that school leaders tied to raising EL student achievement were:

- Differentiated instruction
- Extended or systematic English Language Development (ELD)
- Response to intervention (RTI)
- Leveled reading time
- Infusing ELD throughout the entire curriculum
- Using Guided Language Acquisition Design (GLAD) strategies, and
- Seeking out or developing rigorous curricula

These strategies are not mutually exclusive, and in many cases the use of one was intertwined with or supported the use of another.

Differentiated Instruction

The majority of school leaders (11 out of 18) emphasized their focus on differentiated instruction, where teachers were expected to tailor materials based on the ability levels of small groups of students or individual students. As one principal described this approach, “We haven’t adopted a single program expected to fit every student. Instead, we adopted several frameworks and allow teachers the freedom to adapt them to their students.” Several school leaders were candid in acknowledging that properly differentiating instruction may require a significant time commitment. One school leader addressed this issue directly in terms of teacher expectations: “It is an expectation that teachers will give a substantial amount of time to differentiation.” This school leader justified his position by stating, “[We] just really think that’s the silver bullet, not just in reaching ELs, but those that are talented, and those with special needs. It’s a big spectrum... Regardless of specific labels, one size fits all will never fit all when it comes to teaching.”

Response to Intervention (RTI)

Differentiating instruction was most often implemented at the classroom level through the use of small group instruction informed by a cohesive RTI model. More than half of the school leaders (10 out of 18) highlighted intervention strategies, (including using differentiated small groups and one-on-one instruction when needed), as methods to increase achievement of ELs and other students who may be struggling. Schools utilized various techniques to implement RTI in their school settings. Some schools used work stations to provide a portion of students with the opportunity to work independently, while other students were taken aside to review the day's materials with the teacher. One school used tutoring contracts with families to target struggling students and encourage them to attend tutoring outside of school. This school identified students based on their progress on portfolio work and contacted parents with an individualized list of targeted areas that the student needed to improve upon. Another school offered a Saturday reading group in addition to half an hour spent daily for intervention times with small groups or individual students, as needed.

Schools with robust RTI models often relied on additional staff members or dual-teaching models to allow for supervision and instruction of multiple groups of students simultaneously. Seven school leaders were explicit in saying that additional staff members play a crucial role in the delivery of RTI. Schools used instructional aids, after school staff, literacy specialists, Resource Specialist Program (RSP) teachers, or even dual-teaching models to service students who could benefit from small group or one-on-one instruction. Typically, school leaders using one of these methods described having a portion of time set aside each day (for example an hour or two), during which time a teaching aide or similar staff member would visit the classroom to work with small groups. Conversely, some schools used the instructional aide to lead the majority of the class, while the lead teacher engaged in re-teaching or providing other supports to small groups.

Extended or Systematic English Language Development (ELD)

Some schools provided additional time during the day for their EL students, (or all students at some sites), to work on specific components of English development, such as speaking or writing (10 out of 18). At one school, any students who are far behind in reading are given two additional hours a day of accelerated reading programs to catch them up to grade level. Another school provides 30-45 minutes of ELD time daily for all students to focus on speaking ability and to practice practical conversation skills. One elementary school sorts students by English Language Arts mastery level across grades during ELA time in order to target ELD to students struggling with similar standards. In general, school leaders noted the regular and broad use of extended ELD time for their students. As one leader of K-8 school where ELD is provided to all classrooms stated: "Daily ELD varies from grade level to grade level, year to year; it's not [necessarily] an hour, but a consistent block of time."

The most commonly cited component of ELD that participants emphasized was students' reading skills. One participant explained that developing these skills was necessary for students at all levels: "Reading strategies need to be taught throughout K-12 curriculum." Several school leaders stated that they rely on leveled reading strategies to group students by ability and accelerate language acquisition, especially for ELs (8 out of 18). The implementation of leveled reading time varied by school, with some setting aside an hour during the ELA block for guided and leveled reading time, while one school leader provides additional reading periods to the school's ELs for two hours a day. This particular school leader noted that one of the additional hours occurs during the social studies or science time, and another hour is provided after school. Schools use various curricula to implement guided reading, including those available through Fountas and Pinnell, Lucy Calkins, Scholastic's Reading Counts, Compass Learning, Open Court, and others.

English Language Development Infused Schoolwide

In addition to the focus on specific ELD time for EL students, several school leaders stated that they insist on ELD being infused throughout the school day (8 out of 18). Although several of the individuals in this group overlapped with those that emphasized extended or systematic ELD time, this group included two interviewees who said they did not see the benefit of this strategy. One school leader explained, "I think it's not beneficial to have ELD time. Nobody develops language in a box... The entire school's curriculum is language-based." Other participants insisted on language development strategies being used during math, physical education (PE), and in after-school programs. "Even PE teachers learn reading and math strategies," noted one school leader.

Guided Language Acquisition Design (GLAD)

Seven out of 18 school leaders referenced using GLAD strategies at their school sites to improve instruction of ELs. GLAD strategies call for the use of visual guides and interactive techniques to engage students in a variety of ways to improve their language development. One school leader described GLAD strategies as a metacognition tool that essentially helps students to develop effective learning practices. There are a variety of ways that GLAD training has been incorporated into schools. At some schools, all teachers have been trained in GLAD, while at other schools only some teachers received formal training and were then expected to train other teachers at their school. Two school leaders had GLAD coaches visit their campuses in order to evaluate the level of fidelity with which GLAD strategies had been implemented in classrooms. One leader of a dual immersion school said that teachers were also experimenting with using GLAD strategies in their Spanish program due to the transferability of practices.

Rigorous Curriculum Design

Seven leaders emphasized the importance of rigorous curriculum content. "[We] need to have a rigorous

curriculum. [The curriculum] needs to be alive, active, and connected to something real, like the community,” said one leader. Another said that each teacher was responsible for creating their own curriculum.³⁶ Other school leaders took a somewhat conventional approach in selecting curricula, but were actively seeking out curricula that could best serve students with a variety of needs, even if this required using multiple curricula for language development. One school uses Compass Learning and Pen Marks for developing literacy skills, but additionally uses the Rosetta Stone with students that are newcomers. We also heard of some schools using Open Court, a relatively comprehensive curriculum system, but even in these cases flexibility was allowed in order to mold the curriculum to student needs. Flexibility and regular reflection were major themes throughout the discussion of instructional practices, which GLAD strategies had been implemented in classrooms.

Extended Learning

Does your school have an extended school day or year that effectively increases the amount of instructional time to help close the achievement gap with EL students?

We asked school leaders if their school used an extended day or extended calendar year in order to provide additional minutes of instruction to students. Two-thirds (12 out of 18) of our interviewees stated that they used one or both, with 8 school leaders stating that their school year was longer than that of their local school district. Of interviewees that provided details about their relatively extended calendar years, the number of instructional days ranged from 190 to 200, compared to the minimum of 175 days required by the state.^{37 38} One of the schools requires all students to attend summer school.

After school programs were the most popular way to provide extended day learning opportunities, with 7 schools using after school programs to supplement daily instruction with tutoring or other forms of intervention (11 school leaders stated they provide some kind of after school program). In some cases, this meant selecting students to participate in the after school program if they were falling behind or had performed at Far Below Basic on the prior year’s state tests. One school leader stressed the importance of using after school time for intervention work: “[Our] school would not be able to achieve success if it weren’t for extended day. Struggling learners have multiple opportunities to catch the material and master it.” These schools use a variety of staff members to deliver after school instruction, including after school staff, teachers, and part-time retirees. Given that after school staff may not have the teaching experience or training necessary to provide rigorous instruction, one school plans to invest in a reading specialist to help with their after school program next year. The majority of school leaders with after school programs said that their funding was provided through the After School Education and Safety Program, which provides elementary and middle schools eligibility to apply for funding for local after school programs in California.

Professional Development

Does your school offer professional development for teachers that is focused on the needs of EL students?

School leaders provided several examples of professional development offerings that they required of or made available to staff. Three primary areas of professional development were apparent across school leaders:

- Trainings to improve ELD instruction
- Teacher collaboration
- Use of data in decision making

When asked about professional development specifically to help teachers improve their instruction with ELs, nine school leaders told us about ELD trainings being offered to teachers. This included offerings such as GLAD training. One school uses the trainings provided through the Center for Math and Science Teaching (CMAST) of Loyola Marymount University. The CMAST trainings teach skills for making lessons more interactive in order to improve student engagement. The trainings also emphasize the use of academic vocabulary throughout the lesson. Aside from formal trainings, schools also focused on scaffolding techniques and strategies for working with EL students during professional development time. Professional development time was also used by school leaders to cover the numerous topics related to language acquisition: guided reading, writing strategies, direct instruction, and others.

Aside from professional development specific to instruction, eight school leaders explicitly noted the importance of teacher collaboration at their schools. Several school leaders emphasized the use of collaboration as an ingrained part of the school culture, rather than an activity that occurred at a particular time or only within structured teacher teams: “Teacher collaboration [happens] every second of everyday! Individual teachers collaborate in classrooms, have meetings between grade levels and teams, backwards map, and review data. [It] goes on at all times in the day.” One school’s teachers have “shared lesson planning and shared data analysis.” The data analysis sessions are referred to as “data talks”: “We have data talks... If students [increased their reading level], what was working, if they haven’t moved what was going on for them? We factor in CELDT status and how long they’ve been here. It makes a big difference. What comes out of data talks are the types of support [students need].” One elementary school relies on a dual-teaching model, which ensures a high level of teacher collaboration by design: “Teachers have more than two hours a day of planning time, and instead of trying to get really good at teaching six subjects, they are only teaching three. [This] allows for some sort of balance, and also a lot of collaboration. There’s no island. Every teacher has a homeroom partner that they work with, and a conference partner they plan with and analyze data with.” While this model may appear to be unsustainable given the financial constraints that

public schools face in California, this school's leader shared that she prioritizes the dual-teaching model above other costs that could be seen as extraneous. Her school uses a public school facility made available through Proposition 39, has a relatively lean administrative staff, and keeps technology and field trip costs to a minimum.

The use of data in decision making was noted by seven school leaders as a component of professional development. Several of these school leaders said that using data to inform practice is a key component of their school's professional culture. "We have to collaborate when data shows the need. We have to swap ideas and implement that. Data is transparent across our organization," said one leader. Another described the detail with which professional development time was used to discuss trends in testing data: "The day after assessments, [our school] has a day of professional development for the teachers to go over the results together, look at results school-wide, teacher-wide, and for each student." This school and others used the day after interim or benchmark assessments to discuss trends in student results and to plan student interventions. One school leader noted the importance of having a cycle of inquiry approach to using data to continually reevaluate student needs: "We all see ourselves as learning. I have to find the patterns to see what we need to do next and what we need to learn next. [Teaching] is never a finished product here." Using a results-oriented cycle of inquiry was explicitly mentioned by one school leader as a guiding principle for driving professional development and for making necessary changes to instruction midstream: "During assessment time... we meet together as a school to do a results-oriented cycle of inquiry. We meet to discuss results on the interim data-based assessments [and plan] interventions, realignment, re-teaching, anything that needs to happen in between [assessment] times during the year, anything that could help students' achievement." The data used by school leaders were not always quantitative; one school relied primarily on observation data and holistic measures of performance to evaluate teachers throughout the year in order to target areas of needed growth. Four school leaders also stated that data-driven decision making was one of the most important practices in closing the achievement gap with ELs.

Parent Engagement

How does your school engage with families of EL students?

When we asked school leaders about their strategies for encouraging parent engagement, 14 pointed to their successes with holding parent events. In a couple of cases, these were fairly typical parent events, such as orientations, back-to-school nights, and teacher conferences. However, many schools provided additional opportunities for parents to get involved, such as monthly or bi-weekly parent coffees with school principals, social events such as movie nights, and educational events. Nine of our school leaders said they offered educational programs to their parents, ranging from informational sessions on helping students with their homework to adult English courses. Some schools educate parents on the U.S. education system and the requirements for college, such as completing A-G courses. One school leader described an insightful experience in one college readiness workshop: “A telling comment was when we did a parent night last year in our Spanish-speaking room talking about pathways to college. At the end a father stood up and said, ‘I didn’t realize you didn’t have to go to community college before a four-year university.’”

School leaders described using a variety of strategies to connect with their parents in addition to hosting events. From a school staffing perspective, nine school leaders stressed the importance of having bilingual staff available to interact with parents and provide translation services. In addition to the practicality of having bilingual staff available, one school leader noted the importance of having bilingual staff to increase parents’ levels of confidence in the school environment: “Everything is bilingual so parents do not feel isolated or uncomfortable. They never feel the hierarchy, such as English is [better].”

Challenges

What is the primary challenge you face in serving EL students?

Although we received a wide variety of answers, the most common answer provided by six participants was that EL students were behind their peers academically upon entering school. School leaders noted that this was more than an issue of EL students being behind their English-only peers in terms of English language skills, but that their EL students also frequently lacked a basic foundation in their home language.

One elementary school leader expressed his view of incoming EL students’ education gaps: “The number one thing to change is that we need more research about how the problem with ELs is really that they have no real foundation in any language... Research shows you can learn language faster if you have a robust vocabulary

in a second language. The challenge for our population is not having vocabulary in any language.” Some school leaders also stated that many of their EL students had never experienced academic content in a developmentally appropriate preschool setting, or lacked books in the home, factors that could contribute to a student entering kindergarten behind his or her peers.

Teacher Quality

What is the single most important factor when designing a program to close the achievement gap with ELs?

Not surprisingly, eight school leaders cited having high-quality teachers as the most important factor in closing the achievement gap with ELs. Some school leaders look for a certain level of expertise in their teaching staff, which one leader defined as: “Having a really knowledgeable staff that has worked with ELs before and understand the nuances and challenges of working with ELs.” Other school leaders stressed the level of commitment or passion on the part of teachers as being the most critical component of teacher quality: “At my school, every single person who works at our school has to believe from the bottom of their hearts that all students can achieve at high levels, they want them to achieve at high levels, and they’re prepared to do everything it takes to make sure their kids achieve at high levels. If you don’t believe that, you don’t get hired. If you believe that and have zero experience and your demo lesson has been horrible, but that’s your belief and you’re willing to do whatever it takes, you’re the right person for our school.” Regardless of the selection criteria, our school leaders were clear that having an engaging and skillful teacher in the classroom was critical to their schools’ success with EL students. More school leaders pointed to quality teachers as one of the most important factors in closing the achievement gap with EL students than parent engagement or school culture.

Conclusion

CCSA set out to explore research questions relevant to the success of EL students in California’s charter schools. CCSA’s interviews with 18 school leaders along with data analysis on student performance and demographic data have supported two major findings:

1. Across several data sources and over several years, EL student performance is higher at charter schools. While some of the differences were modest, the consistency of this finding was striking.
2. EL enrollments are lower at charter schools than at comparable traditional public schools. Different disaggregations (by charter type, urban-rural, grade level and region) show varying sizes in the gap (with the gap closed in some instances).

The school leaders we interviewed shared a myriad of best practices that exemplified a strong commitment to serving historically underserved students in their local communities, holding themselves accountable to growing student achievement, and finding creative ways to engage parents. These schools provided impressive examples of executing on rigorous academic expectations for all students and holding staff accountable for student outcomes. We believe the lessons shared in effective recruitment and instructional practices are applicable not only to the inclusion and education of EL students in charter schools, but also to the achievement gap closing efforts seen in other historically underserved populations.

While we only interviewed a subset of charter school leaders and were limited in the analyses we conducted, we hope that this report will spur additional discussion and research on charter school impacts with underperforming and underserved student groups. In particular, additional research is needed to better understand how parent demand and knowledge of charter schools can contribute to the composition of charter application pools and enrollment trends as well as the disparity in EL enrollments at rural and nonclassroom-based charters. The best practices in instruction here only survey the broad spectrum of approaches used successfully across charter schools to accelerate learning with EL students; more research is needed to better understand which types of interventions are most effective in charter school environments. There were also issues that we were not able to address in this report, including reclassification of ELs and long-term outcomes for EL students across charter schools. These are topics that require additional attention from researchers, educators, and policy makers.

Given the vast and growing numbers of ELs in California schools, it is imperative to find the best and most appropriate ways to support ELs' educational success. Our results suggest that while charter schools have made great strides in helping EL students achieve at high levels, we have more work to do. Some California charter schools have found success in recruiting and enrolling substantial EL student populations; other charter schools in the state can benefit from the lessons they share in overcoming the misperceptions and language barriers that may hinder parents of EL students from enrolling them in charter schools. The academic performance results reported here outline many instructional best practices that all California schools, charter and traditional, could benefit from learning in their quest to help California EL students achieve. California's future – at least in part – depends on our ability to address EL students' educational needs and to prepare them for success in school and in life.

Appendix A: Glossary Of Acronyms & Definition Of Key Terms

CALLA - Cognitive Academic Language Learning Approach
CCSA – California Charter Schools Association
CELDT - California English Language Development test
CDE - California Department of Education
CEC - California Education Code
CREDO - Center for Research and Education Outcomes
CST English-Language Arts - California English Language Arts Standards Test
EL - English Language Learner
ESL - English as a Second Language
GIS – Geographic Information Systems
HLS - Home Language Survey
I-FEP - Initially Fluent English Proficient
L1 - Student’s first language
L2 - Student’s second language
PPIC - Public Policy Institute of California
R-FEP - Reclassified Fluent English Proficient
SBE – State Board of Education
SDAIE - Specifically Designed Academic Instruction in English
SIOP - Sheltered Instruction Orientation Protocol

Classroom-Based and Nonclassroom-Based Schools

- **Nonclassroom-based:** Schools where less than 80% of instructional time is offered at the school site when students are “engaged in educational activities required of those pupils and are under immediate supervision and control of an employee of the charter school who possesses a valid teaching certificate.” (EC 47612.5)
- **Classroom-based:** Schools where at least 80% of instructional time is offered at the school site.

CCSA's Definition of Autonomy

Autonomous charter schools appoint a majority of their board of directors, do not use their authorizing districts' collective bargaining agreements, and are directly funded through the state, regardless of nonprofit status.

Semi-Autonomous charter schools appoint a majority of their board of directors, are incorporated as 501(c)3 nonprofits, and either:

- Use their authorizing districts' collective bargaining agreements, or
- Are indirectly funded through their local districts.

Non-Autonomous Charter Schools either:

- Allow their authorizing districts to appoint the majority of their board of directors, or
- Appoint the majority of their board of directors, are not incorporated as 501(c)3 nonprofits, use their authorizing districts' collective bargaining agreements, and are indirectly funded through their local districts, or
- Appoint the majority of their board of directors, are not incorporated as 501(c)3 nonprofits, and do not use their authorizing districts' collective bargaining agreements, but are indirectly funded through their local districts.

Management Model:

- **CMO school:** School that is part of a charter management organization (CMO), which is an organization that operates 3 or more schools linked by a common philosophy and centralized governance or operations.
- **Network school:** School that is part of a Network, which is a group of schools linked by a common philosophy but not centralized governance or operations. Networks are also entities that would otherwise fit definition of CMO but have fewer than three schools.
- **Freestanding:** Freestanding schools include both start-up single-site schools and traditional district schools that have converted to charters that are not part of a network or CMO affiliation.

Start Type (CDE Definition):

- **Conversion:** Schools that converted from a traditional public school into a charter school
- **Start-up:** Schools that started organically without converting from an existing school

Student Family Income (CDE Definition):

- **Low-income:** Schools where 50% or more of students are reported eligible for the federal Free/ Reduced Price Lunch program
- **Not low-income:** Schools where less than 50% of students are reported eligible for the federal Free/Reduced Price Lunch program

Appendix B: Literature Review

English Learner Identification

Schools in California are allowed little discretion when it comes to the initial classification of ELs. All schools must follow a state-mandated process that specifies particular criteria for initial classification. However, parents can significantly influence whether their child is classified as EL through the answers they provide on the Home Language Survey (HLS). If parents at charter schools are more likely than parents at traditional public schools to use the HLS to ensure their child is not classified as EL, this may help explain lower EL enrollment rates at charter schools.

California's EL classification laws allow schools limited flexibility in the initial classification process. California's Education Code requires that schools make a primary home language determination when a student is first enrolled in a California charter or traditional public school (CDE, 2010). To make the primary home language determination, the school requires parents to fill out the HLS, a survey containing the four questions below:

1. Which language did your child learn when he/she first began to talk?
2. Which language does your child most frequently speak at home?
3. Which language do you (the parents or guardians) most frequently use when speaking with your child?
4. Which language is most often spoken by adults in the home
(parents, guardians, grandparents, or any other adults)?

If the parent provides an answer other than "English" for any of the first three questions, then the student is required to take the California English Language Development Test (CELDT), a standardized test that is used to identify students with limited English proficiency and determine the level of English language proficiency for those students (CDE, 2010; CDE, 2012c). If the parent provides an answer other than "English" on the fourth question, the student can be tested at the district's discretion. The CELDT provides each student with a score ranging from "one" (beginning) to "five" (advanced) for their overall English ability, as well as a score for each of four specific language domains: listening, speaking, reading, and writing. Students in grades K-1 are classified as "Initially Fluent English Proficient (I-FEP)" if they receive an overall score of four or higher and domain scores of 3 or higher in the Listening and Speaking domains. Students in grades two-12 are classified as I-FEP if they receive an overall score of four or higher and domain scores of three or higher in each of the four language domains. If students do not meet these criteria, they are classified as ELs (CDE, 2011).

There have been some critiques of California's initial classification process. Most of the literature argues that the HLS is over-inclusive and therefore results in an excessive number of students being required to take the CELDT (Bailey & Kelley, 2010; Bedolla and Rodriguez; 2011). While schools have little discretion over the initial classification process, parents can potentially influence the initial classification of their child through the HLS. If parents choose to answer "English" for all four of the HLS survey questions, it is up to the school to make a proactive determination of the child's language fluency. Unless school staff override the HLS, the student is not administered the CELDT and will automatically be identified as a native English speaker (CDE, 2011).

There is some evidence to suggest that parents have the motivation to avoid classifying their child as an EL. Some parents share the popular perception that EL education is not equal to the education for native English-speakers. Reports have shown that parents have the perception that "pull-out" programs – programs where EL students are removed from the regular class for part of the day to focus on English learning with a separate instructor - detract from their child's learning (Guo, 2010). This may be the case in California, where the Education Code requires students identified as ELs to be placed in a Structured English Immersion classroom for one year after classification, unless their parent files a waiver (CDE, 2006). Abedi (2008) found that parents systematically under-report non-English households on the HLS.

In order for HLS underreporting to affect the under-enrollment of ELs in charter schools compared to traditional public schools, this underreporting would have to occur more frequently at charter schools than at traditional public schools. Empirical studies have not been conducted to determine whether this is in fact the case.

Reclassification

As a student's English language ability improves, they have the opportunity to be reclassified from EL to Reclassified Fluent English Proficient (R-FEP). California's education code requires that districts take into account four criteria when determining whether a student is reclassified: (1) the student's CELDT score (which is administered annually until the student is reclassified), (2) teacher evaluation, (3) parental opinion and consultation, and (4) a comparison of the student's English performance relative to their English-proficient peers (CEC, Section 313(d)). The district is allowed discretion, however, on the relative weight given to each of the four criteria, and the proficiency thresholds used within each criterion (CDE, 2009).

The State Board of Education (SBE) provides guidelines for reclassification in addition to the requirements set forth in the California Education Code. The SBE recommends that districts use the CELDT as the primary criteria for determining reclassification. The SBE recommends that districts consider ELs for reclassification if they receive

an overall CELDT score of four or five, and a score of three or higher on each domain. The SBE also recommends that districts use the California English Language Arts Standards Test (CST for English-Language Arts) in order to compare the candidate to his or her English proficient peers (CDE, 2009).

In practice, many districts employ criteria that are stricter than the guidelines established by the SBE (Jepsen and Alth, 2005; Jacobs, 2007). A Public Policy Institute of California (PPIC) study found that in 2002, only 29 percent of the students who achieved the SBE's recommended CELDT score for reclassification were actually reclassified, suggesting that schools take other factors into consideration or use higher CELDT thresholds than SBE's recommendation. Some districts require that students receive a score of four or higher in each domain on the CELDT. Administrators may also set a relatively high threshold when using a standards test to compare EL students to their English proficient peers (Jacobs, 2007). The other criteria used for reclassification also vary significantly across schools (Jepsen and Alth, 2005; Jacobs, 2007). For example, one study found that many schools use the SAT-9 or CAT-6 tests instead of the CST to evaluate English ability relative to their peers. The proficiency threshold used for these tests was also found to vary widely (Jepsen and Alth, 2005).

In recent years academic literature has begun to explore how the timing of reclassification of ELs affects academic outcomes. Reclassification must occur at the appropriate phase of a student's proficiency in English in order to maximize the student's academic outcome. Upon reclassification from EL to R-FEP, students abruptly lose access to the extra resources dedicated to teaching ELs (Robinson, 2009; Flores, Painter, & Pachon, 2009). If a student is reclassified early, that student will not be fully prepared for an English-only classroom, and academic performance will suffer as a result (Robinson, 2009). If reclassification occurs late, students may be foregoing precious school time in the mainstream classroom in favor of remedial ESL classes that are no longer beneficial to the student (Robinson, 2009).

Authors have attempted to test whether reclassification occurs during the right period of EL development by measuring the impact that reclassification has on test performance. The results of these studies have been mixed. One study of reclassification in the Los Angeles Unified School District (LAUSD) found results that suggested reclassification of students at those schools was not occurring on time, allowing students to remain classified as ELs for an extended period (Flores et al., 2009). Another study that evaluated a large urban school district in California found results that suggested reclassification in elementary and middle schools were occurring at the right phase of EL proficiency, but reclassification in high school was occurring early (Robinson, 2009).

We did not include an analysis of reclassification rates in this report. The ability for school districts and individual charter schools to use different reclassification criteria made a comparison of reclassification rates impractical

without detailed knowledge of the criteria used. Additionally, some school leaders reported that they made modifications to their reclassification criteria over time, further increasing the complexity of an analysis comparing and contrasting reclassification rates.

Self-Selection and Student Populations

There exists a base of academic literature suggesting that California's charter schools disproportionately attract specific racial and ethnic minorities that are non-ELs. Some studies have found that charter schools disproportionately serve specific racial groups (Frankenberg and Lee, 2003; Finnigan et al., 2004; Zimmer, 2003). One study of California schools found that African American and white students were more likely to be enrolled in charter schools, while Hispanic and Asian students were less likely to be enrolled in charter schools (Zimmer, 2003). Other studies have found that African Americans disproportionately transferred to charter schools that had a high concentration of African American students (Booker, Zimmer, & Buddin, 2005). This evidence suggests that the under-enrollment of ELs at charter schools may at least in part be driven by charter schools attracting minorities other than ELs. Preliminary Geographic Information Systems (GIS) analysis by CCSA has found some examples where this appears to be the case. An analysis based on demographic data available in the 2010-11 school year revealed some examples of charter schools that served a mostly African American population, while their nearest traditional public schools enrolled a largely Latino, EL population.³⁹

Additionally, some immigrant parents may be less likely to actively pursue government services such as applying for enrollment in a charter school. Academic literature has found that immigrants are less likely to seek out a wide variety of services, from healthcare (Derose, Escarce, & Lurie, 2007; Kaiser, 2008) to food stamps (US Department of Agriculture, 2004). Explanations for this behavior range from stigmatization of immigrant status (e.g. undocumented immigrants) to barriers due to limited English proficiency (Derose et al., 2007).

Recruitment of English Learners in Charter Schools

While a substantial amount of academic literature provides guidance on how schools can connect with parents of ELs who are already enrolled in their school, there is limited literature available on how schools can reach out to parents of ELs who are not yet enrolled in their school. In lieu of academic literature, this report relies on guidance from online publications and testimonials from other charter schools that have attempted to increase EL enrollment. These sources recommend the following strategies for recruiting ELs and their parents: "word of mouth", advertising in multiple languages, holding information sessions in EL communities, and connecting with local community agencies that serve immigrant populations.

Many schools cite “word of mouth” as the primary method through which they recruit parents of EL students (Lazarin & Ortiz-Licon, 2010). When immigrant parents are asked how they chose their school, they often cite family and friends as a main determinate (Colorin Colordao, 2008). Relying on word of mouth does not have to be a purely passive recruitment strategy. Schools can harness the existing EL population at their school and encourage them to actively recruit other EL students (Colorin Colordao, 2008). For example, schools can ask parents of ELs to talk to a group of parents at a recruiting event to describe the positive experiences they have had with their school (Colorin Colordao, 2008).

Schools can proactively recruit ELs by advertising in multiple languages. For example, the International Charter School of Pawtucket, Rhode Island advertises on their local radio station and sends informational materials to potential feeder schools across the state in three different languages (Lazarin & Ortiz-Licon, 2010).

Schools have also found success in actively reaching out to EL parents through information sessions and open houses. For example, YES Prep Gulfton, a high school in Houston, Texas, has their staff make presentations to surrounding elementary schools and middle schools. They also hold information sessions in apartment complexes and offer pizza as an incentive to attend. At these presentations they communicate in both English and Spanish (Lazarin & Ortiz-Licon, 2010).

Some researchers recommend reaching out to local community agencies that serve immigrant populations. These agencies can help schools understand the needs of their local immigrant community, which can help school leaders overcome cultural differences and refine school programs to reflect the needs of local families (Colorin Colordao, 2008).

English Learners’ Achievement Gains in Charter Schools

Analysis of the achievement gains of ELs in California’s charter schools has shown that on average charter schools have been more successful at improving EL performance than traditional public schools. For example, a study by the Center for Research on Education Outcomes (CREDO) at Stanford University (2009) compared the growth in academic performance at California charter schools to traditional public schools from the 2005-06 to 2007-08 school years. They found that ELs at charter schools performed better than ELs in traditional public schools in making gains in reading and math (CREDO, 2009). These results are consistent with CCSA’s own analysis of California schools, discussed more thoroughly in the section of this report titled Trends in Academic Achievement.

School-Wide Reforms

Three common school-wide reforms that have proven successful at improving EL achievement include: developing a comprehensive school-wide vision for EL instruction, developing an assessment system to ensure teacher accountability and inform instruction, and providing ongoing professional development to instructors.

Many schools that have been effective at improving EL performance benefitted from a comprehensive school-wide vision for EL instruction (Berman, Minicucci, McLaughlin, Nelson, & Woodworth, 1995; Coady et al. 2003). For example, in their review of several case studies in California, Texas, and elsewhere, Berman et al. (1995) found that schools that became effective at increasing EL outcomes were willing to reevaluate their entire system of schooling, including structure and content of the curriculum, learning environments, language development strategies, and organization and school-wide decision-making (Berman et al., 1995).

Another common characteristic of schools that are successful at improving EL performance is that they have adequate assessment systems in place to serve dual purposes for the school: to act as a means for holding teachers accountable for the progress for their students, and to act as a tool for teachers and administrators to inform instruction. Researchers have found that successful schools use assessment to meet both of these goals (Doherty, Hilberg, Pinal, & Tharp, 2003; Montecel & Cortez, 2002; Spauling, Carolino, & Amen; 2004; Ruiz-de-Velasco & Fix, 2000; Lenski, Ehlers-Zavala, Daniel, & Sun-Irminger, 2006).

Some research has shown that low-achieving students improve their performance when teachers are held accountable for student outcomes (Lenski et al., 2006). A successful accountability mechanism measures student progress towards clearly defined standards, provides students with a clear understanding of the standards they are expected to meet, and establishes mechanisms for identifying students with special needs (Ruiz-de-Velasco and Fix, 2000; Lenski et al., 2006; Doherty et al., 2003; Montecel & Cortez, 2002; Spauling, S. et al.; 2004). Accountability measures should also be tied to the EL instructional philosophy of the school (Lenski et al., 2006).

A successful formative assessment system provides educators with ongoing information about student progress throughout the school year, and provides educators with the opportunity to change instruction according to student progress. Formative assessment should be tied to the standards or goals established by the educators (Lenski et al., 2006). Authors argue that assessment mechanisms should be designed specifically with ELs in mind, and should be able to monitor their progress in English language attainment as well as other content areas (Cook, 2008; Lenski et al., 2006; Ruiz-de-Velasco & Fix, 2000). Recognizing that ELs come from a wide variety of educational backgrounds, some authors argue that educators should tailor their assessment to meet the literacy backgrounds particular to the ELs of their school or classroom (Lenski et al., 2006). Authors also encourage

teachers to not only rely on formal testing, but to also use alternative forms of assessment such as observations, journals, questionnaires, and portfolios (Lenski et al., 2006).

Schools that are successful at improving EL performance also promote ongoing professional development for teachers. Research has shown that ELs benefit from teachers who are well informed about the theories behind their EL instruction and its goals (Berman et al., 1995; Montecel and Cortez, 2002). Many teachers, including veteran teachers and teachers in content areas other than English, are often not appropriately trained to meet the specific learning needs of ELs (Ruiz-de-Velasco and Fix, 2000). Therefore, schools can improve EL performance by investing in professional development tailored specifically towards EL instruction (Coady et al., 2003).

Professional development should expose teachers to lessons about first and second language acquisition, teaching content subjects to ELs, alternative methods of assessment, and socio-cultural issues in education (Coady et al., 2003). Professional development should be a collaborate process that empowers teachers to shape the direction of their own learning (Lucas, 2000; Gonzalez & Darling-Hammond, 1997). Common types of professional development include meetings that invite cross-teacher collaboration, mentor teachers, in-class observation, and inviting experienced EL instructors to present best practices to teachers (Ruiz-de-Velasco & Fix, 2000; Lucas, 2000).

Instructional Models

While the literature does not agree on a single specific instructional model for teaching ELs, it does generally agree on several characteristics common to instructional models that improve EL outcomes. An effective instructional model acknowledges and addresses the challenges faced by ELs and must be applied over several years in order to be effective (Collier, 1992; Genesee, Lindholm-Leary, Saunders, & Christian, 2005; Hakuta, Butler, & Witt, 2000). Other common characteristics of effective instructional models include: utilizing specialized direct or interactive instruction, incorporating English learning across multiple content areas, incorporating the student's first language into instruction, encouraging higher-order thinking, and Response to Intervention (RTI) strategies (Genesee et al., 2005; Spaulding et al., 2004; Ruiz-de-Velasco and Fix, 2000; Berman et al., 1995; Collier, 1992; Verdugo & Flores, 2007; Chavez-Reyes, 2010; Coady et al., 2003; Doherty et al., 2003; Montecel & Cortez, 2002).

There are several studies substantiating the finding that ELs benefit from specialized instruction that takes into account the particular challenges of ELs. For example, Collier's (1992) seminal longitudinal study of EL performance found that EL students whose parents refused bilingual or English as a Second Language (ESL)

services suffered major decreases in reading and math achievement. By the 5th grade, these students had English and math scores that were three-fourths of a standard deviation below students who received bilingual or ESL services (Collier, 1992). These students were also much more likely to drop out, and have significantly lower test scores by 11th and 12th grade (Collier, 1992). Other studies have found similar results (Genesee et al., 2005; Hakuta et al., 2000). In their comprehensive review of the literature on the subject, Genesee et al. (2005) concluded that research consistently showed that any specialized program, whether bilingual or ESL sheltered instruction, was able to close the learning gap between ELs and their English-only speaking peers. Several school leaders we interviewed were not necessarily supportive of “pull-out” types of programs, but had instead invested in other types of specialized instruction, as described in the findings of this report.

ELs also benefit from programs that are consistent and sustained over time. Hakuta et al. (2000) found that it takes three to five years for ELs to achieve oral proficiency in English, and four to seven years to achieve academic proficiency in English. Similarly, Collier (1992) found the minimum length of time it takes for ELs to reach grade-level performance in English to be four years. Since it takes many years for students to become proficient in English, it follows that ELs benefit from a program that is sustained over a long period of time. Collier (1992) concluded that an effective program must be sustained for five to six years on average. In their review of the literature, Genesee et al. (2005) found that programs with extended instruction outperformed programs with short-term instruction (i.e. “early-exit” programs).

Researchers emphasize the importance of teaching ELs reading and writing skills and strategies, encouraging student-to-student discussions in English, and discourage relying solely on emphasizing authentic written language (Genesee et al., 2005; Spaulding et al., 2004; Ruiz-de-Velasco and Fix, 2000; McLaughlin et al., 2000). For example, McLaughlin et al. (2000), engaged in a study that employed a combination of teaching English skills and strategies as well as interactive instructional methods to sets of second grade EL students in California, Virginia, and Massachusetts, and monitored their academic improvements relative to their peers. Their intervention provided direct instruction on how to infer meaning of words from context, the use of cognates, and recognition of root words. They also constructed interactive learning exercises, where the teacher called upon groups consisting of both ELs and English-only speakers to choose the appropriate words to complete a sentence. McLaughlin et al. (2000) found that their intervention helped close the achievement gap for ELs by 50 percent on measures of vocabulary knowledge and reading comprehension. In contrast, de la Luz Reyes (1991) conducted ten case studies using a process-based approach that emphasized authentic writing. The author found that, although students were able to write in English, their understanding of complex ideas, context, and construction of meaning suffered. The poor results led the author to conclude that “the practice of implementing popular instructional programs without incorporating appropriate social, cultural, and linguistic adaptations appears to be ineffective” for ELs (de la Luz Reyes, 1991).

Another commonly cited successful teaching practice is the integration of language learning across multiple content areas. For example, Berman et al.'s (1995) case study of several schools in California and elsewhere found that successful schools often integrated bilingual and sheltered instruction with different content areas including language arts, mathematics and science (Berman et al., 1995). Teachers incorporated EL learning into the oral and written content production for these subjects. For example, one school worked on sharpening language skills in their science classroom by having students engage in the exploration of real-world phenomena and then encouraging them to engage in open discussions with their peers. Teachers facilitated student hypothesis building, and directed the process to keep the discussion on track (Berman et al., 1995).

EL students benefit when schools incorporate the first language (L1) into the teaching environment (Collier, 1992; Verdugo & Flores, 2007; Chavez-Reyes, 2010; Coady et al., 2003). Verdugo and Flores (2007) explain that the use of native language is important because it helps clarify important points being made in English and enhances students' understanding and focus of the material. Collier (1992) argued that the greater the amount of instruction that is done using L1, combined with English language (L2) support, the higher ELs can achieve academically. She concluded that when L1 support is integrated into instruction for at least six years, EL students can make significant gains in closing the achievement gap. Interestingly, this positive effect of incorporating L1 is only observed over long periods of time. That is, for the first two to three years of instruction, students taught only in English (L2) outperform bilingually taught students. But after the third or fourth year, bilingually taught students catch up to and eventually surpass monolingually taught students in academic performance (Collier, 1992).

RTI instruction is another method that may be successful at improving EL academic achievement (Linan-Thompson, Vaughn, Prater & Cirino, 2006; VanDerHeyden, Witt, & Gilbertson, 2006; Brown & Doolittle, 2008). RTI is a multi-tiered, culturally and linguistically responsive teaching method that incorporates regular assessment of student performance to inform instruction (Brown & Doolittle, 2008). Regular performance assessment plays a big role in RTI. Students are regularly given performance assessments, which are used to inform refinements to the curriculum and to determine whether each student is placed in the appropriate tier (Brown, 2012). Some studies have found that RTI can be an effective strategy for teaching ELs (Linan-Thompson, Vaughn, Prater, & Cirino, 2006; VanDerHeyden, Witt, & Gilbertson, 2006). For example, Linan-Thompson et al. (2006) ran an experiment where they randomly applied RTI to students at schools that were predominantly EL. They found that EL students who received RTI treatment scored higher on average on English tests than students in the control group who did not receive RTI treatment.

Studies have found that an effective EL curriculum incorporates higher-order thinking (Berman et al., 1995; Doherty et al., 2003; Genesee et al., 2005; Montecel & Cortez, 2002). Berman et al. (1995) found that schools that were successful at teaching ELs provided a high quality curriculum that paralleled the curriculum provided to English-only students at the same grade level (Berman et al., 1995). Successful programs required students to draw connections across content areas and apply language to real-world experiences (Berman et al., 1995).

Extra-Curricular Strategies

Two extra-curricular strategies that have proven effective at improving EL performance are increased out-of-school time and providing the resources for ELs to succeed in post-secondary education.

Several studies have found that ELs who participate in after-school activities have a greater chance of improving their academic performance. Welsh et al. (2002) studied the effects of the New York City's After-School Corporation, a program that provided support for after-school activities for disadvantaged children. The study found that students who participated in this after-school program, which was held five days a week and loosely tied activities to material the students were learning in class, achieved greater test scores than comparable students who did not participate. The authors explicitly tracked the progress of ELs in this program, and found that they realized achievement gains relative to their non-participant peers (Welsh et al., 2002).

Goldschmidt and Huang (2007) performed a longitudinal study on LA's Best, an after-school program in Los Angeles that targets disadvantaged youth. Nearly half of LA's Best participants are ELs. LA's Best combines academic learning (through homework time, tutoring, and activities in science, reading and writing, and computer learning), recreational time (including arts and crafts, games, and sports), performing arts, and health and nutrition. The authors found that LA's Best after-school program did lead to modest academic achievement gains for participants relative to their non-participant peers, although the gains did not pass tests of statistical significance in many cases. They also reported that students who attended LA's Best had improved work habits, attitudes towards learning, and homework completion (Goldschmidt & Huang, 2007).

It is important for schools to provide ELs with the resources necessary for post-secondary education. Schools can do this by ensuring ELs complete courses that are prerequisites for higher education (Coady et al., 2003), providing counselors who can prepare students and families with knowledge of how to navigate US college institutions, and promoting extra-curricular activities that can be looked favorably upon by college admission boards and are often under-attended by ELs (Ruiz-de-Velasco and Fix, 2000).

Parent Engagement Research

It has been widely recognized that parental involvement can significantly impact a student's academic performance (Tellez & Waxman, 2010). When parents are fully engaged, homework completion rates improve, school behavior problems decrease, students are more motivated to do well, and students are absent from school less frequently (Tellez & Waxman, 2010). Therefore, it is of paramount importance that schools include parental involvement as part of their strategy for improving EL performance (Tellez & Waxman, 2010; Coady et al., 2003).

There are a variety of issues that impede parental involvement in their EL student's education. Language barriers between parents and the school are an oft-cited example that can severely limit communication (Waterman & Harry, 2008). This can lead to a lack of understanding about the school's expectations or an inability to communicate the types of resources available to students at the school (Waterman & Harry, 2008; Chavez-Reyes, 2010). The school's lack of familiarity with EL parents' culture and background can also be an obstacle. Authors say that it is important for schools to understand the different cultural expectations that parents may have for their child or the school (Chavez-Reyes, 2010). Finally, immigrant families more frequently face other factors that can pose challenges to their child's education or limit parental engagement, such as economic hardship (Chaudry et al., 2010) or coming from a fractured family structure (Suarez-Orozco, 2002).

Researchers provide several recommendations to help schools improve EL parent involvement. Schools can communicate clearly by providing interpreters, hiring bilingual staff, and translating materials to be sent home in ELs' native languages. Extra care must be taken when translating documents to avoid literal translation, and instead take into account cultural differences and background (Waterman & Harry, 2008). Researchers generally encourage frequent communication between schools and parents, whether through personal phone calls to the parents, meeting with parents, or open houses held more than once per year (Waterman & Harry, 2008; Naughten, 2004). It is also important that schools communicate the expectations of parental involvement to the parents, and provide guidance on how to engage in potentially unfamiliar school practices, such as reading report cards, selecting classes in secondary school, and encouraging students to use guidance counselors (Naughten, 2004). Schools should also create an environment that facilitates parent-to-parent interactions, such as workshops and informational meetings (Waterman & Harry, 2008).

Appendix C: Value-Added Analysis Methodology

Estimating the Effect of Charter Schools on the Academic Achievement of English Learners.

This study utilized a quasi-experimental research design to evaluate the effectiveness of charter and traditional public schools. Our methodology was built off of the value added work utilized by Daley and Valdes (2006). In this section, we articulate the two-staged method that was used for estimating the impact of charter and traditional public schools on the academic achievement of ELs.

Many researchers have discussed the inherent difficulties in making valid, causal claims about the impact of charters' effects on student achievement (e.g., Betts & Tang, 2011). Rubin's counterfactual model (1974, 1978, 1990, 2004) identifies the underlying complication in making a causal inference. To define a causal effect we need to know what would have happened to a given participant if she had never received a particular treatment or intervention, but we can only observe the participant under the specific conditions in which the treatment or intervention were received. What this means in the current study is that we can never know how a charter student would have performed if she had been enrolled in a traditional public school, nor can we know exactly how a traditional public school student would have performed in a charter school.

A casual inference can more readily be made if one conducts a randomized experiment, where randomization produces a treatment and control group that are equivalent on all observable and unobservable characteristics. In this case, outcomes experienced by the control group serve as an unbiased estimate of what would have happened to the treatment group in the absence of the program (the counterfactual). Previous researchers have utilized lottery studies of charter students to compare the performance of students enrolled in charters and nearby traditional public schools (e.g., Abdulkadiroglu et al., 2009; Hoxby, Murarka, & Kang, 2009). Students in these studies have been randomly assigned to charters and traditional public schools via the lottery process, thereby creating a naturally occurring experiment. Consequently, these studies are typically thought to provide the most rigorous evidence regarding the effectiveness of charter schools. In this study, however, we did not have access to lottery data for any LAUSD charters. For this reason, we utilized Rubin's causal model with a value-added approach to estimate the impacts of charters and traditional public schools on the academic performance of ELs.

In studies such as this one, where we do not have randomized, equivalent groups, additional methodological steps are required to estimate the counterfactual condition of the treatment group. In the current study, we define the

control group as LAUSD students enrolled in traditional public schools, and the treatment group as students enrolled in Zoom! charter schools. In order to estimate the effect of charter school enrollment and attendance, we combined the common workhorse, or difference-in-difference, design with a value-added modeling approach to account for the non-equivalent comparison and treatment groups. In its simplest form, the workhorse design uses pre- and post-tests for each group to examine the relative change in performance between the two groups:

$$\begin{array}{l}
 \text{PARTICIPANTS: } Y_{t-1} \quad X \quad Y_t \quad Y_t - Y_{t-1} = \Delta_p \\
 \text{NON-PARTICIPANTS: } Y_{t-1} \quad Y_t \quad Y_t - Y_{t-1} = \Delta_n
 \end{array}$$

Here, Y_{t-1} equals the average pre-test score for the group, Y_t equals the average post-test score for the group, and X denotes participation in a specific program. The program effect is then estimated as the difference between the average change in participant performance Δ_p and the average change in non-participant performance Δ_n .

Limitations to the simple workhorse design have been well-documented (e.g., Mullainathan, & Duflo, 2004) and include the need to make strong assumptions, e.g., the assumption that unobserved factors have an equal effect on both the treatment and control groups. For this study, employing a simple workhorse design would fail to take into account meaningful differences in student characteristics between the groups, characteristics aside from pre-test performance, that may explain differences in post-test performance. As a result, any differences in outcomes may be attributable to pre-existing non-equivalence between students enrolled in traditional public and charter schools.

Additionally, the simple pre-post design fails to take into account the criterion-based CST, which is our measure of student achievement. Unlike vertically-equated tests, scale scores on the CST are not scaled to facilitate direct comparisons from one grade-level test to the next. For example, one cannot infer that a student who scored 300 on the 3rd grade ELA CST and 300 on the 4th grade ELA CST had no improvement in ELA understanding. Just as we do not have an equivalent control group to estimate the counterfactual, our study of charter schools also lacks equivalent pre- and post-tests to measure changes in achievement.

Stage 1: A Value-Added Approach

Incorporating a value-added model into our study allows us to address some of the limitations in the traditional public workhorse design. A major strength of a value-added model is that it provides an estimate of whether students' academic growth is more than, less than, or about the same as other students. It allows researchers and educators to answer the question of whether a given school is having more, less, or about the same impact as other schools on improving students' academic achievement.

Through this value-added approach we create a two-staged method for estimating the impact of charter schools. In the first stage, we predict each student's CST score in a given year (\hat{Y}) based on CST performance in the previous year and student demographics. To calculate the predicted score for every student with valid ELA and mathematics CST data, we ran separate OLS regression models for each combination of year, subject (ELA and math), and grade level progression (or test-taking sequence for high school mathematics).⁴⁰ The regression model for any given year (t)-subject-grade took this form:

$$\hat{Y}_{it} = \alpha + \beta_1 Y_{it-1}^{ELA} + \beta_2 Y_{it-1}^{MATH} + \beta_3 Y_{it}^{ELA/MATH} + \beta_i X'_i + \beta_s Z'_s$$

Where Y_{it-1}^{ELA} represents the previous year's ELA CST score for student i and Y_{it-1}^{MATH} represents the previous year's mathematics CST score for student i . To improve comparability across grade levels, subject areas, and years, we converted all CST scale scores to standardized scores based on the district mean and standard deviation for each test and year.

To control for potential differences in student performance between charters and traditional public schools that are attributable to student characteristics, we included a set of student demographics, X' , in the model. The set of individual characteristics X' included dichotomous variables to control for all of the following: gender, ethnicity, EL classification, students with disabilities, whether or not the student was held back a grade, and eligibility for the Free or Reduced Price Lunch program. To account for possible differences in performance between charters and traditional public schools, we also controlled for school-level proportions of the student demographics (Z').

Stage 2: Re-Conceptualizing the Workhorse Design

Deviations in a student’s predicted CST score (\hat{Y}) and actual CST score (Y) not accounted for by the regression model covariates are symbolized by ϵ , the residual. In a value-added framework, the residual can function as the estimated “value-added” for the factor of interest, assuming the model controls for all other confounding factors. In the second stage of our causal design, we apply the value-added notion of predicted and residual scores to the quasi-experimental workhorse framework. By substituting a pre-test score for the predicted score, we now have the following quasi-experimental design:

PARTICIPANTS:	\hat{Y}_i	X	Y_i	$\hat{Y}_i - Y_i = \epsilon_p$
NON-PARTICIPANTS:	\hat{Y}_i	X	Y_i	$\hat{Y}_i - Y_i = \epsilon_n$

The difference in a charter school student’s actual score and predicted score (ϵ_p), or value-added, is analogous to a change between pre- and post-test scores in the workhorse design. Mathematically, this is identical to including a fixed effect for charter school enrollment in the regression model. Unlike a simple change in test performance, the use of predicted and value-added scores improves our ability to make causal inferences in two important ways. First, the predicted scores help equate students of traditional public schools and charters, since the regression model controls for differences in prior test performance and student characteristics. Similarly, the residuals provide a relative measure of student performance, in which the values are relative to all other district students in the same test-taking sequence (grade level), with similar prior test performance, similar student demographics, and in schools with similar student compositions, for that year.⁴¹

Second, since we generate a residual score for all students, we have the flexibility to calculate average value-added scores for different sub-classifications of charter students and make comparisons to different groups of students enrolled in traditional public schools. In doing so, we can conduct different comparisons within the same general research design and model. This flexibility has particular relevance to our study given that we examine cross-sectional annual effects over a four-year period.

Analysis of Charter School Effects

The above approach was utilized to analyze each year of CST data, using data for the current and previous year. Students were only included in the analysis if we had data for the given year and the previous year. The difference in the mean residuals for charter and traditional public schools provided an estimate of the effect of charter school enrollment on academic achievement of ELs.

Appendix D: Levels of Autonomy, Classroom Setting, and Urban/Rural Differences

FIGURE 23: Comparison of ELs across School Site Types, Level of Autonomy, and Urban-Rural Status ⁴²

This table shows the number of EL students at each type of public school and their urban and rural differences. This data shows that the largest group of EL's are in Urban schools for both traditional and charter schools, particularly for autonomous charter schools. There are over 100 times more EL students in autonomous urban charters than rural charters, compared to 10 times more EL students in urban traditional public schools and urban non-autonomous charter schools compared to rural schools.⁴³

School Type	Site Type	Autonomy Status	Data Comparison	Urban	Suburban or Town	Rural	Missing	Total
Charter	Classroom-Based	Autonomous	English Learner N	38,242	12,919	358	626	52,145
			School N	344	157	25	14	540
		Semi-Autonomous	English Learner N	1,372	336	12	0	1,720
			School N	15	11	2	0	28
		Non-Autonomous	English Learner N	10,851	7,920	1,178	17	19,966
			School N	110	86	28	1	225
	Non-Classroom-Based	Autonomous	English Learner N	1,486	1,844	227	146	3,703
			School N	36	70	13	12	131
		Semi-Autonomous	English Learner N	117	19	3	0	139
			School N	1	3	2	0	6
		Non-Autonomous	English Learner N	988	694	110	0	1,792
			School N	14	34	17	0	65
	Total	English Learner N	53,056	23,732	1,888	789	79,465	
		School N	520	361	87	27	995	
Traditional Public	Total	English Learner N	592,797	661,647	60,132	1,593	1,316,169	
		School N	3,183	4,131	835	28	8,177	

Appendix E: Methodology and Limitations

We analyzed several sources of achievement data, including the Academic Performance Index (API), Adequate Yearly Progress (AYP), Annual Measurable Achievement Objectives (AMAO), the California English Language Development Test (CELDT), and student-level data to explore trends in the achievement levels of ELs in charter and traditional public schools.

For those data analyses that relied on API data, we downloaded publicly available files from the California Department of Education to conduct the review. These data files were somewhat limited because they only include performance data for those students that were tested. Specifically, it only accounts for students that were tested in grades 2 through 11, and includes some recently reclassified EL students that have not reached proficiency in English Language Arts (ELA). The CDE defines an “EL” student for the purposes of the API as a student who is an English Learner (“EL”) or a reclassified fluent-English-proficient (RFEP) student who has not scored at the proficient level or above on state testing in English Language Arts three times after being reclassified. See more details in Appendix B (Identification). Additionally, the counts of students were based on the data reported by CDE. In 2008 through 2010, CDE based the determination of whether a student was an EL on the information reported on the student answer documents. After 2010, CDE began to rely on the EL designation as collected in the CALPADS system.

For the qualitative portions of this report, CCSA utilized its unique access to charter school leaders that are showing results in their recruitment and education of EL students and selected 18 of them to participate in an interview and observation analysis for this study. This sample of schools was based on those schools that had high numbers of EL students and high levels of performance with those students.

Appendix F: Materials Cited

Abdulkadiroğlu, A., Angrist, J. D., Dynarski, S. M., Kane, T. J., & Pathak, P. A. (2011). Accountability and flexibility in public schools: Evidence from Boston's charters and pilots. *The Quarterly Journal of Economics*, 126(2), 699-748.

Abedi, J. (2008). The classification system for English language learners: issues and recommendations. *National Council on Measurement in Education, Fall 2008*.

Bailey, A., & Kelly, K. (2010). The use and validity of home language surveys in state English language proficiency assessment systems: a review and issues perspective. *Evaluating the Validity of English Language Assessments Project*. Retrieved on March 9, 2012, from www.eveaproject.com/doc/HLS%20White%20Paper%202010.pdf.

Bedolla, L., & Rodriguez, R. (2011). Classifying California's English learners: is the CELDT too blunt an instrument? *Policy Reports and Research Briefs, Center for Latino Policy Research, Institute for the Study of Social Change, UC Berkeley*.

Berman, P., Minicucci, C., McLaughlin, B., Nelson, B., & Woodworth, K. (1995). School reform and student diversity: case studies of exemplary practices for LEP students. *National Clearinghouse for English Language Acquisition*.

Betts, J. R., & Tang, Y. E. (2011). *The effect of charter schools on student achievement: A meta-analysis of the literature*. Bothell, WA: National Charter School Research Project, Center on Reinventing Public Education. Available at www.ncspe.org.

Booker, K., Zimmer, R., & Buddin, R. (2005). The effect of charter schools on student peer composition. *RAND working paper*. Retrieved on March 15, 2012, from www.ncspe.org/publications_files/RAND_WR306.pdf.

Brinson, D., & Rosch, J. (2010). Charter school autonomy: a half-broken promise. *Thomas Fordham Institute*. Retrieved on March 20, 2012, from www.coweninstitute.com/wp-content/uploads/2010/04/201004_CharterAutonomyReport.pdf.

Brown, J., & Doolittle, J. (2008). A cultural, linguistic, and ecological framework for response to intervention with English language learners. *Culturally Responsive Educational Systems: Education for All*.

Brown, J. (2012). Response to intervention for English language learners: appropriate screening, progress monitoring, and instructional planning – webinar. *National Charter School Resource Center*.

Buckley, J., & Sattin-Bajaj, C. (2010). Are ELL students underrepresented in charter schools? demographic trends in New York City, 2006-2008. *Journal of School Choice*, v5 n1, 40-65.

California Charter Schools Association. (2011a). California charter schools by the numbers. *Fact sheet*. Retrieved on June 21, 2012, from www.calcharters.org/understanding/numbers.

California Charter Schools Association. (2011b). Issue brief: how well are charter schools serving and meeting the academic needs of English language learners in California? *Internal Issue Brief*.

California Department of Education. (2006). English learners in California frequently asked questions. Retrieved on May 22, 2012, from www.cde.ca.gov/sp/el/er/documents/elfaq.doc.

California Department of Education. (2009). California English development test (CELDT): understanding and using the 2009-2010 individual results. Retrieved on March 23, 2012, from www.cde.ca.gov/ta/tg/el/documents/celdt09astpkt1.pdf.

California Department of Education. (2010). “CELDT 101” overview and requirements. Retrieved on May 22, 2012, from www.cde.ca.gov/ta/tg/el/documents/celdt101.pdf.

California Department of Education. (2011). California English Language Development Test (CELDT) information guide. Retrieved on May 22, 2012, from www.cde.ca.gov.

California Department of Education. (2012a). Accountability progress reporting. Retrieved on June 18, 2012, from api.cde.ca.gov/Acnt2011/2011GrthStAPI.aspx?allcids=.

California Department of Education. (2012b). Statewide enrollment by ethnicity. Retrieved on June 18, 2012, from dq.cde.ca.gov/dataquest/EnrollEthState.asp?Level=State&TheYear=2011-12&cChoice=EnrollEth1&p=2.

California Department of Education. (2012c). California English language Development Test - CalEdFacts. Retrieved on June 18, 2012, from www.cde.ca.gov/ta/tg/el/cefceldt.asp.

Callahan, R. (2005). Tracking and high school English learners: limiting opportunity to learn. *American Educational Research Journal*, 42(2), 305–328.

Center for Research on Education Outcomes. (2009). Charter school performance in California. Center for Research on Education Outcomes, Stanford. Retrieved on April 26, 2012, from credo.stanford.edu/reports/CA_CHARTER%20SCHOOL%20REPORT_CREDO_2009.pdf.

Center for Research on Education Outcomes (CREDO). (2014). Charter School Performance in California. Available at: credo.stanford.edu/pdfs/ca_report_FINAL.pdf

Chaudry, A., Capps, R., Pedroza, J.M., Casteneda, R.M., Santos, R., & Scott, M. (2010). Facing our future: children in the aftermath of immigration enforcement. *The Urban Institute*.

Chavez-Reyes, C. (2010). Inclusive approaches to parent engagement for young English language learners and their families. *National Society for the Study of Education*, Vol. 109, Issue 2, 474-504.

Chen, C., Kyle, D., & McIntyre, E. (2008). Helping teachers work effectively with English language learners and their families. *The School Community Journal*, 2008, Vol. 18, No. 1.

Coady, M., Hamann, E., Harrington, M., Pacheco, M., Pho, S., & Yedlin, J. (2003). Claiming opportunities: a handbook for improving education for English language learners through comprehensive school reform. *Education Alliance at Brown University*.

Collier, V. (1992). A synthesis of studies examining long-term language minority student data on academic achievement. *Bilingual Research Journal* (16)1-2, 187-212.

Colorin Colorado. (2008). ELLs in early childhood education: recruiting immigrant families. Retrieved on May 22, 2012, from www.colorincolorado.org/article/25820/?theme=print.

Cook, H.G. (2008). What do we know about ELL formative assessment and how do we develop a system accordingly? *Board of Regents of the University of Wisconsin System, on behalf of the WIDA Consortium*.

- Daley, G., & Valdés, R. (2006). *Value added analysis and classroom observation as measures of teacher performance: A preliminary report* (Publication No. 311). Los Angeles: Los Angeles Unified School District; Program Evaluation and Research Branch; Planning, Assessment and Research Division.
- De la Luz Reyes, M. (1991). A process approach to literacy using dialogue journals and literature logs with second language learners. *Research in the Teaching of English, Vol. 25, No. 3*, 291-313.
- Derose, K., Escarce, J., & Lurie, N. (2007). Immigrants and health care: sources of vulnerability. *Health Affairs, 206, no. 5*, 1258-1268. Retrieved on March 15, 2012, from content.healthaffairs.org/content/26/5/1258.full.html.
- Doherty, R. W., Hilberg, R. S., Pinal, A., & Tharp, R. (2003). Five standards and student achievement. *NABE Journal of Research and Practice, 1*, 1–24.
- Finnigan, K., Adelman N., Anderson, L., Cotton, L., Donnelly, M.B., & Price, T. (2004). Evaluations of the public charter schools program. Final Report. *U.S. Department of Education, Office of the Deputy Secretary*.
- Flores, E., Painter, G., & Pachon, H. (2009). Que pasa? are ELL students remaining in English learning classes too long? *Thomas Rivera Policy Institute*.
- Frankenberg, E., & Lee, C. (2003). Charter schools and race: a lost opportunity for integrated education. *Education Policy Analysis Archives, 11(32)*. Retrieved on March 20, 2012, from epaa.asu.edu/ojs/article/view/260/386.
- Gándara, P., & Rumberger, R. (2003). The inequitable treatment of English learners in California's public schools. *University of California, Linguistic Minority Research Institute*.
- Gándara, P. & Rumberger, R. (2007). Resource needs for California's English learners. *University of California Minority Research Institute*.
- Genesee, F., Lindholm-Leary, K., Saunders, W., & Christian, D. (2005). English language learners in U.S. schools: an overview of research findings. *Journal of Education for Students placed At Risk, 10(4)*, 363-385.
- Gibson, M., & Hidalgo, N. (2009). Bridges to success in high school for migrant youth. *Teachers College Record (11)3*, 683-711.

Goldschmidt, P., & Huang, D. (2007). The long-term effects of after school programming on education adjustment and juvenile crime: A study of LA's BEST afterschool programs. *National Center for Research, on Evaluation, Standards, and Student Testing*.

Gonzalez, J.M., & Darling-Hammond, L. (1997). New concepts for new challenges: professional development for teachers of immigrant youth. *Center for Applied Linguistics*.

Guo, Y. (2010). "Why didn't they show up?" rethinking ESL parent involvement in K-12 education. *TESL Canada Journal, 22, No. 1*.

Hakuta, K., Butler, Y. G., & Witt, D. (2000). How long does it take English learners to attain proficiency? *Linguistic Minority Research Institute*.

Hoxby, C. M. Murarka, S., & Kang, J. (2009). *How New York City's charter schools affect student achievement: August 2009 report*. Cambridge, MA: New York City Charter Schools Evaluation Project.

Izu, J., Carlos, L., Yamashiro, Y., Picus, L., Tushnet, N., Wohlstetter, P., ... Chung, J. (1998). The findings and implications of increased flexibility and accountability: an evaluation of charter schools in Los Angeles Unified School District. *WestEd*.

Jacos, J. (2007). How good is good enough? moving California's English learners to English proficiency. *Lexington Institute*.

Jepsen C., & Alth, S. (2005). English learners in California schools. *Public Policy Institute of California*.

Kaiser Commission on Medicaid and the Uninsured. (2008). Summary: five basic facts on immigrants and their health care. *Kaiser Family Foundation*. Retrieved on March 15, 2012, from www.kff.org.

Lazarin, M., & Ortiz-Licon, F. (2010). Next generation of charter schools: meeting the needs of Latinos and English language learners. *Center for American Progress*.

Lenski, S., Ehlers-Zavala, F., Daniel, M., & Sun-Irminger, X. (2006). Assessing English-language learners in mainstream classrooms. *International Reading Association, 24-34*.

Linan-Thompson, S., Vaughn, S., Prater, K., & Cirino, P. (2006). The response to intervention of English language learners at risk for reading problems. *Journal of Learning Disabilities, Vol. 39, No. 5*, 390-398.

Lindholm-Leary, K., & Hernandez, A. (2009). Disaggregating background factors in the achievement and attitudes of Hispanic students in dual language programs. *Paper presented at the American Educational Research Association Annual Meeting, San Diego, California.*

Lucas, T. (2000). Facilitating the transitions of secondary English language learners: priorities for principals. *NASSP Bulletin, 2000*, 84; 2.

Maxwell-Jolly, J. (2011). English learners and out-of-school-time programs: the potential of OST programs to foster English learner success. *Center for Applied Policy in Education, UC Davis School of Education.*

McLaughlin, B., August, D., Snow, C., Carlo, M., Dressler, C., White, C., Lively, T., & Lippman, D. (2000). Vocabulary improvement and reading in English language learners: an intervention study. *A research symposium on high standards in reading for students from diverse language groups: research, practice & policy, US Department of Education.* Retrieved on April 12, 2012, from www.ncela.us/rcd/bibliography/BE023768.

Miron, G. N., & Nelson, C. (2002). What's public about charter schools? *Corwin Press, Inc.*

Miron, G., Urschel, J., Mathis, W., & Tornquist, E. (2010). Schools without diversity: education management organizations, charter schools, and the demographic stratification of the american school system. *Education and the Public Interest Center, University of Colorado, Boulder.*

Montecel, M. R., & Cortez, J. D. (2002). Successful bilingual education programs: development and the dissemination of criteria to identify promising and exemplary practices in bilingual education at the national level. *Bilingual Research Journal, 26*, 1–22.

Mullainathan, S., Bertrand, M. & Duflo, E. (2004). How much should we trust differences-in-differences estimates? *Quarterly Journal of Economics, 119*(1), 249-275.

Naughten, S. (2004). English language learners, immigrant children and preschool for all: the importance of family engagement. *Children Now.*

Robinson, J. (2009). Effects of reclassification: a causal-effects approach and a call to focus on appropriate instruction and opportunities for English learners. *netfiles.uiuc.edu*. Retrieved on March 30, 2012, from http://jpr.education.illinois.edu/uploads/1/3/2/8/13288953/robinson_reclassification_eepa_2011.pdf.

Rubin, D. B. (1974). Estimating causal effects of treatments in randomized and nonrandomized studies. *Journal of Educational Psychology*, 66, 688-701.

Rubin, D. B. (1978). Bayesian inference for causal effects: The role of randomization. *The Annals of Statistics*, 7, 34-58.

Rubin, D. B. (2004). Teaching statistical inference for causal effects in experiments and observational studies. *Journal of Educational and Behavioral Statistics*, 3, 343-367.

Rubin, D. B. (1990). On the application of probability theory to agricultural experiments. Essay on principles. Section 9. Comment: Neyman (1923) and causal inference in experiments and observational studies. *Statistical Science*, 5(4), 472-480.

Ruiz-de-Velasco, J., & Fix, M. (2000). Overlooked and underserved: immigrant students in U.S. secondary schools. *The Urban Institute*.

Rumberger, R., & Gándara, P. (2004). Seeking equity in the education of California's English learners. *Teachers college record*, Vol. 106, No. 10.

Short, D., Echevarria, J., & Richards-Tutor, C. (2011). Research on academic literacy development in sheltered instruction classrooms. *Language Teaching Research*. 15(3).

Silver, D., Saunders, M., & Zarate, E. (2008). What factors predict high school graduation in the Los Angeles unified school district? *California Dropout Research Project Report, No. 14. University of California, Linguistic Minority Research Institute*.

Spaulding, S., Carolino, B., & Amen, K. (2004). Immigrant students and secondary school reform: compendium of best practices. *Council of Chief State School Officers*.

Suarez-Orozco, C. (2010). Promoting academic engagement among immigrant adolescents through school-family-community collaboration. *ASCA*, 14:1.

Tellez, K., & Waxman, H. (2010). A review of research on effective community programs for English language learners. *The School Community Journal*, 2010, Vol. 20, No. 1.

U.S. Department of Agriculture. (2004). Characteristics of food stamp households: fiscal year 2003. *Prepared by Karen Cunnygham (Mathematica Policy Research Inc)*.

Vandell, D.L., Reisner, E., & Pierce, K. (2007). Outcomes linked to high-quality after school programs: longitudinal findings from the study of promising after school programs. *University of California, Irvine, University of Wisconsin – Madison, Policy Studies Associates, Inc*.

VanDerHeyden, A.M, Witt, J.C., & Gilbertson, D. (2006). A multi-year evaluation of the effects of a response to intervention (RTI) model on identification of children for special education. *Journal of School Psychology*, 45, 225-256.

Verdugo, R., & Flores, B. (2007). English-language learners: key issues. *Education and Urban Society* (39)2, 167-193.

Waterman, R., & Harry, B. (2008). Building collaboration between schools and parents of English language learners: transcending barriers, creating opportunities. *National Center for Culturally Responsive Education Systems*.

Welsh, M.E, Russell, C.A., Williams, I., Reisner, E.R., & White, R.N. (2002). Promoting learning and school attendance through after school programs: student level changes in educational performance across TASC's 1st three years. *Public Policy Studies Associates, Inc*.

Zimmer, R., Buddin, R., Chau, D., Daley, G., Gill, B., Guarino, C., ... Brewer, D. (2003) Charter school operations and performance: evidence from California. *RAND education*. Retrieved on March 20, 2012, from www.lao.ca.gov/2003/rand_charter/053003_rand_charter_schools.pdf.

Endnotes

¹ Alternative School Accountability Model (ASAM) schools (charter and traditional) are excluded from analyses.

² CCSA categorizes charter schools into autonomous, semi-autonomous and non-autonomous schools depending on their governance and funding mechanisms. We focus here on autonomous, classroom-based charters because these schools make all of their own governance decisions. Arguably, if there were a bias against EL enrollments it would be identified in this group. Many charter opponents argue that charters are discriminatory against ELs, but this data shows that urban autonomous charters actually enroll a greater percentage of EL students.

³ Appendix D shows the number of students and schools disaggregated by school type and urbanicity. Autonomous classroom-based charters educated 66% of all ELs according to 2012-13 API demographic data. Autonomous classroom-based charters educated half of all tested students in charters in that same year and as of 2014-15 make up 55% of all California charter schools.

⁴ We included areas designated as towns in our “suburban” category. These categories of urban, suburban, and rural are based on data from the U.S. Census and are available through the CDE in the Public Schools Database at www.cde.ca.gov/ds/si/ds/fspubschls.asp.

⁵ K-12 schools represent 11% of charter schools and 0.5% of traditionals among non-ASAM schools in this dataset. The small number of traditional public K-12 schools does not make a robust comparison with charter K-12 schools possible. It is important to note that the majority of K-12 schools are rural and/or nonclassroom-based, thus aligning with other EL enrollment trends cited in this report. Specifically, 81% of K-12 charter schools are non-classroom based (and 6% of all K-12 charters are virtual schools). In contrast, 22% of all charters are nonclassroom-based (0.9% of all charters are virtual). Further, 19% of all K-12 charter schools are rural compared to 9% of all charters.

⁶ Due to the large number of school districts in a relatively small geographic area, we used the municipal boundary of San Jose City to group schools in that area.

⁷ In 2006, average API scores for ELs was 637 while average API scores for white students was 801 – a difference of 164 points. In 2011, average API scores for ELs was 706 while average API scores for white students was 845 – a difference of 139 points.

⁸ See www.cde.ca.gov/TA/AC/ay for more information on California’s API system and www.cde.ca.gov/TA/AC/ay for more information about the AYP system.

⁹ California EC 313. For regulatory language, visit www.leginfo.ca.gov/cgi-bin/displaycode?section=edc&group=00001-01000&file=313-313.5.

¹⁰ API scores were weighted to account for schools of different enrollment sizes, since API scores represent the achievements of all students that were tested and included in the final score. We did this for EL API scores by using the number of EL students in each school and their EL API scores. EL subgroup API scores were multiplied by the number of EL students included in the API, then divided by the total number of EL students in charter and traditional public schools from 2008-09 through 2012-13.

¹¹ See page 22 of www.cde.ca.gov/ta/ac/ap/documents/infoguide12.pdf for the CDE’s definition of a “numerically significant” subgroup.

¹² All analyses in the report exclude all charter and traditional public schools that designated as alternative school accountability model (“ASAM”), Alternative, or have fewer than 50 test-takers included in their API.

¹³ Portrait of the Movement 2014, CCSA, September 2014, www.calcharters.org/2014/08/portrait-of-the-movement-2014-report.html

¹⁴ We performed this analysis by aggregating all EL students that achieved proficiency in ELA and math and divided that number by all EL students included in AYP, separately for charter and traditional public schools.

¹⁵ The value-added analyses in this report relied on traditional public school comparison data provided by the Los Angeles Unified School District. This district

was chosen for its large, diverse urban school and student population.

¹⁶ ZOOM! Data Source is a student assessment data management system started by CCSA. When schools uploaded student-level data into ZOOM! Data Source, they designated CCSA as a FERPA-protected researcher on their behalf, allowing us to perform anonymized studies of school performance in accelerating student growth. Schools are able to use Zoom! Data Source to store and track student progress on CSTs and other tests. Schools can also download sample tests to use throughout the year as part of a benchmark testing system.

¹⁷ For a more detailed explanation of the Value Added Methodology, please see appendix C.

¹⁸ A summary of results is available at www.calcharters.org/blog/2012/10/fact-sheet-2012-ccsa-statewide-public-opinion-results.html.

¹⁹ The CDE defines an “EL” student for the purposes of the API as a student who is an English Learner (“EL”) or a reclassified fluent-English-proficient (RFEP) student who has not scored at the proficient level or above on state testing in English Language Arts three times after being reclassified. See more details in Appendix B (Identification).

²⁰ Alternative School Accountability Model (ASAM) schools (charter and traditional) are excluded from analyses.

²¹ We excluded Alternative School Accountability Model (ASAM) charter and traditional public schools from analyses due to the large amount of missing data for these school sites. Additionally, we conducted an academic performance analysis of EL students on the API, excluding ASAM sites due to a lack of comparability to other schools. Excluding these sites in the enrollment section allows for comparability in numbers of schools across both analyses.

²² We included areas designated as towns in our “suburban” category. These categories of urban, suburban, and rural are based on data from the U.S. Census and are available through the CDE in the Public Schools Database at

www.cde.ca.gov/ds/si/ds/fspubschls.asp.

²³ Appendix D shows the number of students and schools disaggregated by school type and urbanicity. Autonomous classroom-based charters educated 66% of all ELs according to 2012-13 API demographic data. Autonomous classroom-based charters educated half of all tested students in charters in that same year and as of 2014-15 make up 55% of all charter schools.

²⁴ We did not have comprehensive data on classroom-based and nonclassroom-based traditional public schools and also do not consider traditional public schools to have varying degrees of autonomy according to CCSA's definition of autonomy. Therefore, all traditional public schools included here have been categorized as classroom-based and comparable to charter schools across various levels of autonomy.

²⁵ K-12 schools represent 11% of charter schools and 0.5% of traditionals among non-ASAM schools in this dataset. The small number of traditional public K-12 schools does not make a robust comparison with charter K-12 schools possible. It is important to note that the majority of K-12 schools are rural and/or nonclassroom-based, thus aligning with other EL enrollment trends cited in this report. Specifically, 81% of K-12 charter schools are non-classroom based (and 6% of all K-12 charters are virtual schools). In contrast, 22% of all charters are nonclassroom-based (0.9% of all charters are virtual). Further, 19% of all K-12 charter schools are rural compared to 9% of all charters.

²⁶ Note that Figure 18 includes all schools, including special education schools, K-12 alternative schools, as well as ASAM schools. Other figures throughout the report exclude these alternative schools from the analyses.

²⁷ Due to the large number of school districts in a relatively small geographic area, we use the municipal boundary of San Jose City to group schools in that area.

²⁸ The local geographic analysis included 194 charter schools in LAUSD for 2011-12. The initial gap in EL enrollments was 4.2% for all charter schools compared to traditional public schools in LAUSD. This difference narrowed to 3.6% once we selected the 173 autonomous charters in LAUSD.

²⁹ Local Education Agencies (LEAs) have the ability to define their criteria for reclassification so long as it follows a set of guidelines set forth by the CDE.

³⁰ While schools in California do have the discretion to select students to take the CELDT regardless of the Home Language Survey results, our line of inquiry assumed that the survey results were the primary factor in identifying ELs. Interview results supported this assumption.

³¹ For more information on the CELDT visit: www.cde.ca.gov/ta/tg/el/cefceldt.asp. For a copy of the Home Language Survey visit: www.cde.ca.gov/ta/cr/documents/hlsform.doc.

³² The full report can be found at ies.ed.gov/ncee/wvc/pdf/practice_guides/20074011.pdf.

³³ Office of English Language Acquisition Toolkit can be found here: www2.ed.gov/about/offices/list/oela/english-learner-toolkit/index.html and other Office for Civil Rights best practices can be found here: www2.ed.gov/about/offices/list/ocr/ellresources.html

³⁴ CCSA defines a CMO as a group of three or more charter schools operating under the same leadership or governance structure.

³⁵ CDE API data for 2011-12.

³⁶ Teachers at this school were asked to use strategies from the Readers and Writers Workshop as a foundation to which modifications would be made by bringing in standards and scaffolding techniques for ELs.

³⁷ See the Legislative Analyst's Office 2012 report, "Update on School District Finance in California" at www.lao.ca.gov/reports/2012/edu/year-three-survey/year-three-survey-050212.pdf.

³⁸ After the passage of Proposition 30, some traditional public school districts, including LAUSD, were able to reinstate a calendar of 180 days rather than 175.

³⁹ Based on an analysis of California Basic Educational Data System (CBEDS) data available through DataQuest at data1.cde.ca.gov/dataquest.

⁴⁰ For example, separate regressions were used to predict the performance of a student going from Algebra 1 to Algebra 2 and a student going from Algebra 1 to Geometry. Similarly, different regressions were ran for a student taking a 4th grade ELA test two years in a row (presumably due to grade retention) and a student taking the 3rd grade then 4th grade tests.

⁴¹ This approach helps equate groups but unlike with a randomized experimental design, unobservable differences still pose a potential threat to validity. It is important to recognize this limitation. A situation in which eligible students were randomly assigned to charters, e.g., a lottery study, would allow for an experimental design. Such a design would likely produce less biased estimates of the effect than the design utilized for this study. Unfortunately, the lack of availability on students applying to charter lotteries did not allow us to use either an experimental design.

⁴² Missing data for the urban variable are generally for new schools that have not received a coding by the National Center for Education Statistics as reported in the CDE's Public Schools Database, available at www.cde.ca.gov/ds/si/ds/fspubschls.asp.

⁴³ We did not have comprehensive data on classroom-based and nonclassroom-based traditional public schools and also do not consider traditional public schools to have varying degrees of autonomy according to CCSA's definition of autonomy. Therefore, all traditional public schools included here have been categorized as classroom-based and comparable to charter schools across various levels of autonomy.