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A value-added approach

A report of the
Latino Scorecard Education Action Team

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INTRODUCTION

In 2007-08, the Los Angeles Unified School district (LAUSD) served approximately 700,000 students—more than five times as many as the next largest district in the state. The district also operated more than five times the number of “Program Improvement” (PI) schools—schools that fail to make Adequate Yearly Progress (AYP) as defined by *No Child Left Behind*.¹ Currently, 331 (47%) K-12 LAUSD schools fall into the PI category. Close to half (44%) of the district’s high schools are in Program Improvement status, and 44% of these PI schools have held that designation for five years or more (CDE, 2008). These discouraging outcomes in LAUSD are consistent with those of other large, urban districts that are disproportionately minority and characterized by high levels of student poverty. Yet, as this report concludes, these outcomes, isolated from other important factors, may not provide useful information about “school effectiveness.” Indeed, conflating test results with school effectiveness may cause observers to downgrade or overlook effective schools and programs while encouraging higher-outcome schools to be satisfied with providing mediocre educational opportunities for their students.

Current systems of accountability assume that schools’ test score means are *closely* associated with the quality of a school, and increases are associated with progress. Here, we use a value-added approach to look beyond this one-dimensional metric and gain a fuller picture of a school’s quality and improvement. This study examines two fundamental and pragmatic indicators that we consider measures of a schools’ effectiveness: 1) on-time high school completion; and 2) the extent to which students are on-track for college preparatory course completion (A-G course completion²). As such, this study measures the extent to which high school educational experiences can enhance the knowledge, abilities and skills that prepare and lead to high school graduation and postsecondary opportunities.

As authorized by the *Huizar Resolution to Research Best Practices within LAUSD to Increase Student Achievement*, this study is a first step in identifying best schooling practices in middle schools and high schools that lead to the successful completion of high school and college preparation requirements.³ The results of our study, in other words, will tell us where to look for promising practices. Further studies will then be able to focus attention on understanding those practices. Longitudinal data, provided by the LAUSD, created an opportunity to examine school and district patterns of high school completion and college preparation course completion

1 In California, Program Improvement (PI) is the formal designation for Title 1-funded schools and districts that fail to make Adequate Yearly Progress (AYP) for two consecutive years.

2 The “A-G Requirements” consist of a sequence of 15 year-long courses necessary for admission to California’s public universities (University of California/California State University). Students must pass these courses with a grade of “C” or better for eligibility. Courses include: two years of History/Social Science; four years of English; three years of mathematics; two years of laboratory science; two years of language other than English; one year of visual and performing arts; and one year of a college-preparatory elective.

3 In 2000, United Way of Greater Los Angeles published *American Dream Makers: Facts and Opinions about Los Angeles’ Emerging Latino Majority* to provide a snapshot of Los Angeles’ Latino community. This initial report communicated a clear need to focus energies and resources on moving forward an action agenda. Three years later, a coalition of preeminent local organizations joined together and produced the *Latino Scorecard 2003: Grading the American Dream*, and challenged Los Angeles to put the knowledge produced in its first report to the benefit of all of LA County. In the realm of education, the Scorecard provided recommendations that included the creation of a Latino-African American coalition to advocate for the provision of college preparatory classes to all LAUSD students, hold schools accountable for graduation rates, and to conduct research on the best practices of LA schools that have a strong record of student achievement. The Huizar Resolution to Research Best Practices is a result of these efforts.

using precise measures. In sum, using data of LAUSD's freshman class of 2001-02, this study examines the effectiveness of district high schools in helping various groups of students move from the 9th grade to on-time high school graduation and to graduation with the successful completion of the sequence of courses required for entry into California's public university system.

Our analyses address three central sets of questions about particular groups of first-time LAUSD 9th graders:

- What percentage of students graduate on time—that is, within four years of starting high school—and how do rates differ for groups based on English language proficiency, middle school academic achievement, 9th grade standardized tests, and readiness for challenging, academic coursework in high school?
- What percentage of students graduate on time *and* complete the A-G sequence of courses, and how do rates vary for the groups identified above?
- Which LAUSD high schools increase the likelihood that students who enter high school with different academic profiles will complete high school in four years and complete the A-G course sequence?

Our analyses demonstrates a vast range in LAUSD high school performance and suggests that 1) the school a student attends can make a considerable difference in his/her academic growth and success; and 2) current test-based accountability measures cannot capture the impact of these school differences, especially for those students who are at greatest risk of not graduating from high school.

REVIEW OF THE LITERATURE AND RATIONALE

How best to measure a school's effectiveness has been a topic of interest and debate among educational researchers, educators, and policymakers for decades. A lack of consensus around what is meant by "effective," for whom the practices are effective, and how best to capture effectiveness, continues to have critical consequences. Indeed, the current high-stakes environment created by *No Child Left Behind* (NCLB) and California's *Public Schools Accountability Act* brings these consequences to life.

Under NCLB and California's accountability system, regular assessments of students in key subject areas are conducted to provide evidence of school quality and school improvement. School quality is indicated by the percentage of students that score "proficient" within a given school, at a given time. An increase in this percentage is considered an indication of school improvement. Hence, schools with high average test scores are deemed "effective," and schools with year-to-year increases in scores are deemed "improving."

Using this "snapshot" of average proficiency to determine school effectiveness has serious limitations. Cross-sectional comparisons of different cohorts of students (e.g., one year's 10th grade class compared to the test scores of the previous year's 10th grade class), do not consider random variations in test performance or changes in the levels of cognitive development across different groups of students (Kelly & Monczunski, 2007). Kane and Staiger (2002), for example, found that 50% to 80% of observed achievement gains each year, using data from elementary students in North Carolina, are temporary because of sampling error or other "nonpersistent" causes.

Further, studies have shown that student scores on standardized achievement tests, in a given school at a given time, are more strongly associated with neighborhood, family background, and prior educational experiences both in and out of school than by the current school attended (Raudenbush, 2004; Ballou, Sanders & Wright, 2004). Students' cognitive development or skill reflect this background and past educational experiences. Data from the National Education Longitudinal Study (NELS) showed, for example, that school mean differences among high schools for grades 10 and 12 corresponded to the mean differences between students served by those schools before they entered high school (based on 8th grade performance) (Raudenbush, 2004). As such, schools that make great progress with low-performing students might fail to reach Adequate Yearly Progress (AYP) or Academic Performance Index (API), while schools with advantaged students might reach AYP or API without providing an effective education.⁴ Proponents of value-added assessment assert that their model recognizes the reality that students start at different levels of achievement and that a school can be considered effective when it provides growth to even the lowest-achieving students (Hershberg et al., 2004).⁵ Value-added assessment, therefore, has the potential of providing valid evaluation and comparison of the effectiveness of schools that serve widely different student populations (Meyer, 1996).⁶

In addition to the above criticism about current measures of an effective education, the narrow focus on improving test scores does not adequately hold schools, districts, or states accountable for improving high school graduation rates. "Measures of student proficiency are based on inconsistent and low state standards and often measure basic math and reading skills, not the students' levels of preparation for college and the workforce" (Alliance for Excellent Education, 2007, p.2). Because current legislation does not require uniform calculation of graduation rates, establish a graduation-rate goal, or require schools to improve the graduation rates of student subgroups, this indicator has little meaning. In California, to meet the 2006 graduation rate criteria for AYP, a school or district must have a graduation rate of at least 82.9 percent, or improvement in the graduation rate of at least 0.1 from the previous year, or improvement in the graduation rate of at least 0.2 in the average two-year rate (<http://www.cde.ca.gov/ta/ac/ay/glossary06a.asp>). As such, a high school could meet NCLB requirements by increasing its graduation rate from 50% to 51% over a ten year span.

4 Adequate Yearly Progress (AYP), established by the No Child Left Behind Act (NCLB) measures schools and school districts based on participation on statewide tests, percentage of students scoring at the proficient level or above in language arts and math on statewide tests, performance in the state's accountability program, and graduation rates. Based upon previous performance, schools are given yearly benchmarks for each category. Schools that do not meet AYP for two years in a row can be put into Program Improvement (PI). California's Public School Accountability Act (PSAA) uses the Academic Performance Index (API) to measure school performance. API ranks schools based upon how students score on California standards tests in English, science, math and social studies. The API scale ranges from 200 to 1,000. The state has set 800 as the API target for all schools to meet. Schools that fall short of 800 are required to meet annual growth targets. More information available at <http://www.cde.ca.gov/ta/ac/ay/documents/parentguide08.pdf>

5 Raudenbush and Willms (1995) address the issue of past educational experiences and background in their estimation of school effect by controlling for context. The authors note, if the assignment of students to school is not random, the coefficient on the context variable "will pick up the correlation between the mean score and the true school effect." (quoted in Ballou, Sanders & Wright, 2004). For example, Ballou, Sanders & Wright (2004) conclude that the inclusion of SES and demographic covariates at the student level has little effect in their study of the Tennessee Value-Added Assessment System (TVASS). Controlling for student-level covariates has only a moderate impact on estimated effects, even for teachers, whose classes are entirely low-income or minority.

6 However, assessment must be based on scores or data that are reliable and valid, can be administered at least annually, and can be expressed on a common scale that is meaningful across grade levels (Meyer, 1996).

Using graduation rates as a fundamental indicator of an effective education comes with its own set of shortcomings. Not only is there widespread disagreement about how best to measure graduation rates (de Cos, 2005; Roy & Mishel, 2008), but here, too, studies show that graduation rates are strongly associated with prior educational experiences both in and out of school, neighborhood, and family background. The National Education Longitudinal Study (NELS), a large-scale longitudinal study, offers a view of 8th grade school performance and its relationship to graduation rates and post-secondary outcomes, demonstrating that pre-high school academic performance and schooling experiences predict high school performance and post-high school college enrollment.

A number of smaller-scale studies have found that high school performance and postsecondary educational status are influenced by a student's academic trajectory beginning as early as elementary school (Zarate & Gallimore, in press; Alexander et al., 2001). Longitudinal studies of cohorts have been most successful in exposing patterns that often precede dropping out. Roderick (1993) found that educational experiences—academic performance and school engagement—are the best predictors of who will and will not graduate from high school. Neild and Balfanz (2006) confirmed these findings, showing that many students begin to fall off the graduation track years before they enter the 9th grade. In the district studied by Balfanz, Herzog & Mac Iver (2007), they were able to identify over half of the future dropouts as early as the 6th grade. In many instances, the transition to high school at 9th grade can push students who have been struggling academically, and/or have been disengaged for years, off the graduation path. In sum, education is a cumulative process where high school academic success is informed by earlier academic experiences. As such, this study uses a seven-year longitudinal data set of a cohort of students to capture pre-high school factors that contribute to high school and college preparatory course completion.

Other research that informs this study identifies critical conditions for academic success at the high school level and argues that the particular school a student attends can make a difference (Oakes et al., 2007). Compared to conventional testing alone, longitudinal, student level data that includes the characteristics of the schools students attend allows for more rigorous examination of the relationship between school conditions and student outcomes (Oakes et al., 2007). In particular, indicators of school conditions and learning opportunities (as we define “best practices”) serve as useful predictors of higher rates of graduation and college readiness. These indicators allow reliable and useful access to a complex and hard to measure system by regularly measuring some of its key components (Shavelson et al., 1989; Oakes, 1986). A recent study by Silver, Saunders, and Zarate (2008), for example, found that school-level conditions at both the middle school and high school level impact rates of on time high school graduation. Approximately 42% of between-school variance in on-time graduation rates was explained by three school conditions and characteristics: the percentage of qualified teachers at the school, percentage of English learners, and magnet school status (Silver, Saunders, Zarate, 2008).

Together, these prior studies make clear that longitudinal analysis has the potential to identify points and/or experiences in which district and/or school-level intervention would be most powerful. Further, by considering those points and/or experiences (e.g., algebra course-taking, middle school achievement, limited English skills, etc.), a value-added approach can identify

those schools wherein school-level conditions and/or practices contribute to (or detract from) the academic growth of students as evidenced by on-time graduation and successful college preparation.

Finally, using graduation and college preparation course completion rates as fundamental indicators of an effective education provides an opportunity to gauge whether our schools are doing what they are intended to do—to prepare all students for adult life as productive members of society. Using a value-added model, we provide a list of LAUSD schools we consider more effective in providing academic growth to all students, including those who enter the 9th grade with academic challenges, and enable on-time high school completion and the completion of the sequence of courses required for entry into California’s public university system.

METHODS

Harvey Goldstein (2000) summarized the importance of value-added school evaluation methods by pointing out that it is “now recognized that *intake* achievement is the single most important factor affecting subsequent achievement, and that the only fair way to compare schools is on the basis of how much progress pupils made during their time in school.”

This study uses a value-added approach to measure the impact of high schools on student achievement, controlling for student characteristics and baseline academic achievement. Using data of LAUSD’s freshman class of 2001-02, the study examines the effectiveness of district high schools in helping various groups of students move from the 9th grade to on-time high school graduation four years later, and to graduation with the successful completion of the college preparatory courses required for entry into California’s public university system. The methodology used to gauge effectiveness of the LAUSD schools includes information that captures student characteristics and academic experiences, but also demonstrates how schools do on each dimension individually.

Our analysis of a seven-year longitudinal dataset of the LAUSD’s class of 2005 examined over one million course-taking records of students who attended district schools from 1998-99 through June, 2005. Course-taking data includes course grades, attendance and demographic records, and achievement test results. We linked these student-level data to school-level data to gain a comprehensive understanding of which LAUSD high schools do a better job of guiding particular students toward high school graduation and A-G completion.

We focused our analyses on the cohort of 48,561 students who entered the 9th grade for the first time in 2001-02 and were expected to be members of LAUSD’s graduating class of 2005. This cohort is considerably smaller than LAUSD’s full 9th grade class in 2001-02, which the California Department of Education reports to include 64,307 students. We excluded several groups of students from our analyses. We excluded the 9th graders who had also been 9th graders in the previous year (9th grade “repeaters” from 2000-01).⁷ We also excluded the first-time 9th graders who left LAUSD during high school and transferred, according to district records, to

⁷ In order to limit the sample to first-time freshmen, we include those students who were 8th graders in 2000-01, and progressed to the 9th grade, within LAUSD, in 2001-02.

another school district or to a private school. Finally, we also excluded students who entered LAUSD after the 9th grade because we lacked data of their academic histories or school experiences.⁸

Table 1: Sample Definition

All 9th graders in 2001-02 with attendance records	70,108
Excluding those without 7 th grade attendance in 1999-00 or 8 th in 2000-01	46,574
Including 9 th -graders new to the system: All first-time 9th graders 2001-02	51,323
Excluding students with no course-taking data	50,146
Excluding officially recorded transfers from district	49,803
Excluding students without a school code for 2001-02: Final sample	48,561

The final sample of 2001 first-time 9th graders who were expected to graduate in 2005 is representative of the 2001-02 9th grade class as a whole. Approximately 67% of the sample is Latino, 13% African American, 10% White and 4.5% Asian. Forty-nine percent of the sample is female and 51% male.⁹ Seventy-four percent of the cohort is enrolled in the free/reduced meal program, and 28% of the cohort is identified as English learners.¹⁰ Further, 71% of the sample scored “below” or “far below” basic on 9th grade California Standards Tests, and special education students comprise 10% of both the sample and the larger cohort of 9th grade students in 2001-02.

Tables 3-7, below, are the culmination of a series of analysis designed to show the degree to which certain schools in LAUSD have been successful in seeing their 9th grade cohort through to graduation and A-G completion, when controlling for key correlates of high school completion. The tables show in plain terms the graduation rates at each school for groups that are homogeneous according to four distinct dimensions (CST scores, middle school grades, 9th grade algebra performance, and EL designation). The dimensions were selected because of their predictive value in multilevel models of high school graduation.¹¹

FINDINGS

This section responds to the critical need to understand better how well LAUSD high schools are doing overall, and in particular, how they succeed with students who enter the 9th grade with limited English skills, underprepared academically, demonstrating academic difficulties at times, as well as with those students who enter ready for challenging, academic courses.

8 The final dataset was called from 70,108 9th graders in 2001-02 who attended at least one day of school; 46,574 of those are confirmed first-time 9th graders who progressed from 8th grade to 9th grade in 2001. An additional 4,749 were new to the system as 9th graders bringing the cohort to 51,323. However, those students with no record of completing a single course, and those who transferred out the district (.6%) were removed from the sample providing a final first-time 9th grade sample of 48,561 students.

9 The sample is representative of the 2001-02 9th grade class as a whole. According to the California Department of Education, the 2001-02 9th grade class is comprised of 64,307 students: 48% female, and 52% male; 70% Latino, 13% African American, 10% White, and 4% Asian. Information available at: <http://dq.cde.ca.gov/dataquest/DstEnrAll.asp?cYear=2001-02&cChoice=DstEnrAll&cSelect=1964733-LOSANGELESUNIFIED&Level=district&myTimeFrame=S&cTopic=Enrollment&cLevel=district&TheName=Los^angeles^unified>.

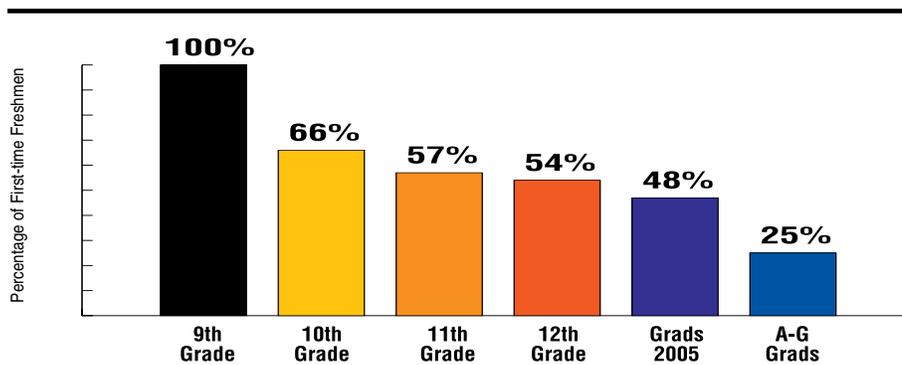
10 Twenty-eight percent of the sample of first-time 9th graders were identified as Limited English Proficient (LEP), and approximately 33% were identified as Reclassified Fluent English Proficient (RFEP).

11 The details of the HM are omitted, but available at: <http://www.lmri.ucsb.edu/dropouts/download.php?file=researchreport14.pdf>

Low overall academic performance for LAUSD’s Freshmen Class of 2001-02

LAUSD 9th graders have about a 50/50 chance of graduating from high school on-time. Four years after beginning high school in 2001-02, 48% of LAUSD first-time freshmen graduated.¹² As Figure 1 demonstrates, departure from the system is most prevalent between the 9th and 10th grade, with 34% of first-time freshmen (16,800 students) failing to move on to the 10th grade on-time. Of these students, 4,312 left the system before the next school year, and the rest repeated the 9th grade. (The majority of these students dropped out eventually as well). By 2004-05, 54% of these 2001 first-time freshmen entered their senior year; at year’s end, 48% graduated.¹³ One-quarter of entering 9th graders graduated four years later with the necessary courses required for entry to the state’s public university system (University of California (UC)/ California State University (CSU)).

Figure 1
Persistence Rates



Graduation and Completion Rates based on Demographic Background

As expected, an examination of demographic characteristics of the LAUSD’s first-time freshmen reveals that graduation and college preparatory course completion rates relate to students’ race, and family income level.¹⁴ African American and Latino students graduate from high school and complete A-G course requirements at lower rates than their Asian and White counterparts. Similarly, students from low-income families who participate in the district’s free/reduced meal program exhibit lower on-time graduation and A-G completion rates than those students who do not qualify for participation.

12 All students that were identified as having transferred from the LAUSD by district records in the 9th grade were excluded from the sample. However, the analyses in this paper included a small number of students (approximately 1.5% of the sample) who transferred out of the district after the 9th grade. Excluding these students from the sample raises on-time completion and A-G rates by less than 1%.

12 That the graduating class of 2004-05 was not subject to passing the California High School Exit Exam (CAHSEE) as a condition for receiving their high school diploma suggests that current on-time completion rates are lower than those reported here. Research has shown that graduation rates fell in California in 2006 (especially for Latino and African American students)—to the lowest rates the State has seen since 1997 (Rogers, 2007).

13 Differences were also found based on gender and age. Forty-two percent of boys finished high school four years later, compared with 54% of the girls. Students who were over age when they entered the 9th grade— those whose date of birth fell at least one year prior to the cut off date for entry into Kindergarten within the LAUSD (12-1-1986)—graduated at approximately half the rate of appropriately aged students. Approximately 29% of over-age students graduated on time compared to 52% of those students who were not over-age, and 12% graduated with A-G.

As Table 2a demonstrates, on-time graduation rates for Asian and White first-time freshmen were 65% and 57%, respectively. Latino and African American first-time freshmen graduated at significantly lower rates; 45% for both groups. These findings are consistent with those of other cohort studies conducted of large urban school districts.¹⁵ It follows that Asian and White members of the cohort completed the sequence of college preparatory course requirements at higher rates than Latino and African American cohort members. More than half (54%) of all Asian members of the cohort graduated with A-G completion, and 41% of all White members graduated with A-G completion. In contrast, 22% and 21% of African American and Latino cohort members graduated with A-G completion, respectively.

Less than half (48%) of entering 9th graders who participated in the district’s free/reduced meal program graduated four years later. Moreover, 24% graduated with the successful completion of the sequence of courses required for entry into California’s public university system.

Table 2a: On-time High School Completion Rates and A-G Completion Rates of 2001-02 LAUSD First-Time 9th Graders by Demographic Background

	<i>Percent of Sample</i>	<i>Percent Graduating on Time</i>	<i>Percent Graduating with A-G Completion</i>
Total	100%	48%	25%
Race/Ethnicity			
White	10%	57%	41%
Asian	5%	65%	54%
Black	13%	45%	22%
Latino	67%	45%	21%
Free/Reduced	74%	48%	24%

The identification of differences in high school graduation and A-G completion rates based on student background characteristics is significant given that opportunities to learn are not equally distributed to students with different background characteristics (UC/ACCORD, 2007). Middle and high schools in which the majority of students are from underrepresented groups are most likely to experience overcrowding; limited access to qualified secondary teachers; limited access to a rigorous, high-quality, college preparatory curriculum; and other critical opportunities to learn. The LAUSD data indicates particular educational experiences and critical bottlenecks in a student’s educational trajectory and points to schools that may enhance prospects for students graduating on-time and completing the A-G sequence of courses.

¹⁵ For example, in their study of Philadelphia public schools, Neild and Balfanz (2006) found that the graduation rates for Asians tended to be in the 60% range; White rates were in the 50% range, and African Americans and Latinos tended to graduate in the 40% range (with African American rates exceeding those for Latinos).

On-time Graduation and A-G Completion Rates based on Educational Experiences

Across the district, on-time high school completion rates are low and course failures are commonplace. Students who enter with limited English skills, low test scores, and with poor academic records in middle school are among the least likely to graduate from LAUSD high schools, particularly with adequate college preparation. On the other hand, students who demonstrate academic preparedness as they enter the high school setting (for instance, those who successfully complete algebra by the 9th grade), graduate at higher rates and with A-G completion.

Limited English Skills. Only one-third of cohort members who entered the 9th grade with limited English skills and were designated as Limited English Proficient (LEP) graduated four years later. Approximately one-tenth (11%) of first-time freshmen designated as LEP graduated with the successful completion of the A-G sequence of courses.

Importantly, we found that students who had been redesignated as fluent-English proficient (RFEP) or as Fluent English Proficient (IFEP) prior to entering their freshmen year graduated at much higher rates than their limited English peers—58% of RFEP students and IFEP students graduated four years later.¹⁶ Similarly, RFEP and IFEP students graduated with A-G at much higher rates (33% and 38%, respectively).

Low Standardized Test Scores. California Standards Tests (CSTs) scores, meant to demonstrate how well students are mastering California’s grade-level content standards, are predictive of on-time graduation and A-G completion.¹⁷ Almost three-quarters (70%) of LAUSD’s cohort of first-time 9th graders in 2001-02 scored “below basic” or “far below” basic on either the math or ELA portion in 9th grade. Approximately 46% of these relatively low-performers graduated from high school four years later compared to 71% of students who scored in the range of basic, proficient, or advanced. Approximately 19% of first-time 9th graders who scored “below basic” or “far below basic” successfully completed the sequence of A-G courses compared to 52% of those students who scored in the basic or above range.

Middle School Academic Performance. Approximately half (49%) of first-time entering freshmen failed (with an F grade) at least one core academic class during their middle school years (6th through 8th grade), and nearly two-thirds received at least two grades of D or lower in middle school.¹⁸ This high rate of poor performance is significant in that students who began high school with a record of earning Ds and/or Fs in middle school had lower rates of on-time high school and A-G completion. On average, students who graduated received less than half of the number of D/F’s in middle school than those students who did not graduate on time.

16 Limited English proficient (LEP) is used to identify those students who have insufficient English to succeed in English-only classrooms. Redesignated fluent English Proficient (RFEP) refers to a student who has been determined to be proficient in English after a period of study in an ESL or bilingual education program. The student is then placed in mainstream English classes. IFEP refers to a student who is from a language-minority home and who has been determined to be fluent in English upon entering the school system according to a state-approved language proficiency assessment.

17 Middle school and high school students are required to take the California Standards Tests in English language arts, mathematics, science and social studies. These analyses only considered students’ performance on the English language arts and math portions. Performance on CSTs form the basis for each school’s Academic Performance Index (API) rank.

18 Courses in four academic areas are considered in these analyses: mathematics, English language arts, science, and social science.

The trajectories of students who enter high school with exceedingly poor records of academic achievement (more than seven D/Fs) are the likeliest to end in high school dropout (only 26% graduate four years later). In contrast, students who begin high school with relatively good records of middle school academic performance (fewer than two D/Fs) most often graduate four years later (71%). However, the outcomes for those students who struggle academically at times, and demonstrate “poor-average” performance (in the context of LAUSD) are less determined. This “middle third,” who received between two and six Ds or Fs in middle school, are almost equally likely to drop out as they are to graduate. For them, the quality of their high school experience and the social and academic supports they receive are most likely to make a difference.¹⁹

Of first-time freshmen in 2001-02 who received between two and six Ds and/or Fs in middle school, over half (55%) graduated from high school on-time, and less than one-quarter (23%) graduated with the successful completion of A-G course requirements.²⁰

Algebra Course-Taking. In contrast to those students who begin high school with records of poor academic achievement and/or performance, students who entered 9th grade well prepared to take and pass the first semester of college preparatory algebra were far more likely to graduate in four years and to graduate having completed the A-G college preparatory course requirements for UC/CSU. Many of the most proficient students, of course, pass algebra before the 9th grade and do not need to repeat the course as 9th graders. Even excluding these students, 69% of those who pass algebra in the 9th grade graduated, and 45% graduated having completed the A-G requirements successfully.

Table 2b: On-time High School Completion Rates, and A-G Completion Rates of 2001-02 LAUSD First-Time 9th Graders by Academic Experiences

	<i>Percent of Sample</i>	<i>% Completed High School</i>	<i>% Completed A-G</i>
Total	100%	48%	25%
Limited English Proficient	28%	33%	11%
Low CST*	70%*	46%	19%
“Poor-Average” Middle School Performance	33%	55%	23%
Algebra	19%	69%	45%

*Based on 9th grade CST scores. Includes students who scored “below basic” or “far below basic” on math or English language arts portion of test.

¹⁹ Approximately one-third of the cohort fell into this middle group; 38% of the cohort received more than 2-6 D/F's; and another third (31%) of the cohort received less than 2-6 D/F's.

²⁰ Differences in A-G completion rate among groups based on number of middle school D/Fs are pronounced: more than 4 times higher in the middle group (2-6 D/Fs) than the bottom group (7+ D/Fs); and more than twice as high in the top group (<2 D/Fs) than the middle group (53% v. 23% v 5%).

As these outcomes demonstrate, students who enter the high school with limited English skills complete high school at a rate far below the district’s already low on-time graduation rate, and few of these students (11%) graduate with the preparation required for entry into California’s public university system. Students who enter high school underprepared, as demonstrated by 9th grade CSTs, exhibit on-time graduation rates slightly lower than the district average, with less than one-fifth completing the A-G requirements successfully. Approximately half (55%) of students who enter high school with records of poor-average middle school course failure, graduate on time, and less than one-quarter (23%) graduate with the necessary college preparation for entry into one of California’s public universities. Unfortunately, current accountability measures do not capture these outcomes.²¹ Test-based growth targets do not fully coincide with or represent the goals set for LAUSD high schools and students: high school graduation and preparation for a wide range of postsecondary opportunities for all of its students. Yet, standard judgments regarding LAUSD’s “best” or most effective high schools continue to rely on these test-based outcomes. The following section provides an analysis of the relative effectiveness of each LAUSD high school by exploring how well each succeeds with these particular groups of students. We have defined “relative effectiveness” as exceeding the district’s on-time completion rate *and* A-G completion rate for the groups described as opposed to comparing rates of success for whole schools, without considering the vast differences in preparation that students bring to schools. The schools listed on the following tables are the most effective in the district by this standard.

Not all high schools within the LAUSD are equally effective

Our analysis demonstrates that some schools within the district are more effective than others in enabling students to graduate on time and with the necessary preparation to enter California’s public university system. However, we are mindful that these “more effective” schools fall short of enabling all (or even most) of their entering freshmen to graduate four years after beginning high school and with the courses required for California’s public university system.

More Effective Comprehensive High Schools with English Learners

Of the 47 large comprehensive high schools in the district, 20 schools had “better” on-time completion rates for English learners: that is, these schools exceeded the district’s average of 33% completion rate for this population. Nine of these schools also exceeded the district’s A-G completion rate of 11% for English learners.

At Gardena Senior High, for example, 48% of English learners completed high school on-time; a rate that is on par with the LAUSD’s overall graduation rate for first-time entering 9th graders, and close to the high school’s overall on-time graduation rate of 52%. In other words, English learners at Gardena High School graduate at a rate that is just slightly lower than the rest of the population. At Fairfax, 22% of English learners graduated with successful A-G completion—

²¹ English learners are included in AYP/API calculations. In addition, AYP/API identifies significant ethnic/racial groups, and students identified as “socioeconomically disadvantaged.” AYP/API calculations determine how well these subgroups meet test-based accountability growth targets. In 2005, the only significant subgroup that did not meet its growth targets in the district overall were English learners.

double the district’s rate (11%) of A-G completion for this population. At Jefferson Senior High, 42% of first-time freshmen with limited English skills graduated four years later and approximately one-fifth (18%) did so with the successful completion of A-G.

Calculations from the information provided in Table 3 demonstrate that a school’s percentage of English learners does not determine whether that school is more effective. For example, 9% of the students at El Camino Real are English learners and 51% of Jefferson’s freshmen class of 2001-02 was comprised of English learners (Jefferson serves one of the largest populations of English learners in the district).

Table 3: More Effective LAUSD Large Comprehensive High Schools with Students with Limited English Skills by On-time Completion and A-G Completion Rates

SCHOOL	<i>Percent Completed HS on Time</i>	<i>Percent Completed A-G</i>	<i>N</i>	<i>N Cohort of First-Time Freshman</i>
Gardena	48%	14%	125	831
Verdugo Hills	46%	15%	183	625
El Camino Real	44%	22%	94	990
Chatsworth	43%	14%	148	791
Jefferson	42%	18%	468	912
Lincoln	40%	12%	274	699
Polytechnic	40%	18%	408	1000
Fairfax	39%	22%	241	721
Marshall	37%	34%	357	1043

The effectiveness of the schools listed above stand out even further when we compare rates of on-time and A-G completion with those of the district’s least effective schools. At LAUSD schools that ranked at the bottom of the list (not shown), less than 20% of students with limited English skills complete high school on-time and less than 5% graduate with A-G completion. However, as the rates for the schools listed above demonstrate, even LAUSD’s “more effective” comprehensive high schools with English learners have a distance to go in enabling more of these students to graduate on time with college preparatory course completion.

More Effective High Schools with Students with low 9th Grade CST Scores

Some schools do a better job of helping poorly prepared students to graduate, and to graduate with A-G completion, while other schools are less effective with these struggling learners. Table 4 lists eight LAUSD comprehensive high schools that graduate poor performers (“below” or “far below basic”) on 9th grade CSTs at a rate that exceeds the district average of 46% and enabled these students do so with the successful completion of A-G (also at a rate that surpassed the district average of 19% for this population of students).

Jefferson Senior High School, for example, enabled more than half (52%) of low-performing freshmen to graduate from high school four years later. Further, approximately one-quarter (26%) of Jefferson High School’s low-performing freshmen graduated with successful A-G completion.

Table 4: More Effective LAUSD Large Comprehensive High Schools with Students with Low CST Scores by On-time Completion and A-G Completion Rates

SCHOOL	<i>Percent Completed HS on Time</i>	<i>Percent Completed A-G</i>	<i>N</i>	<i>N Cohort of First-Time Freshmen</i>
Polytechnic	57%	21%	745	1000
Carson	56%	35%	663	989
Marshall	53%	49%	606	1043
Eagle Rock	53%	25%	351	590
No. Hollywood	53%	21%	715	1019
Jefferson	52%	26%	736	912
Verdugo Hills	48%	23%	427	625
Franklin	47%	25%	545	778

The schools listed in Table 4 demonstrate that many LAUSD comprehensive high schools maintain a large gap between on-time graduation and A-G completion rates for students with low 9th grade CST scores. Schools may be more effective in enabling students with low academic skills to complete high school, but few of their students are prepared to pursue a wide range of postsecondary options. For example, while Polytechnic and North Hollywood high schools are among those with higher on-time completion rates, just 21% of students at each of these schools fulfill the A-G requirements. On the other hand, 53% of Marshall high students graduate on time and 49% complete A-G.

At those schools that ranked at the bottom of the list (not shown), less than one-third of the students with low 9th grade CST scores completed high school on-time and less than 10% graduated with A-G completion.

More Effective High Schools with Poor-Average Middle School Performers

As indicated, approximately one-third of LAUSD entering freshmen in 2001-02 received between two and six D/F grades in middle school. These students represent a relatively homogenous group of students wherein high school practices and conditions can have a clear and discernible impact on student achievement. A critical metric of success for LAUSD high schools, therefore, is the extent to which high schools have success with students who have struggled with their academic coursework at times.

Table 5 lists LAUSD comprehensive high schools that are more effective than average in enabling first-time freshmen who received between two and six D/Fs during their middle school years (6th-8th grade) to graduate on time and with A-G completion. Of the 47 comprehensive high schools in the district, 17 had on-time graduation rates that exceeded the district average of 55%. Of these, eight schools surpassed the district's A-G completion average of 23%.

Not only did the schools listed in Table 5 graduate first-time freshmen with “poor-average” middle school records at rates that exceeded the district average, but almost all of the schools listed in Table 5 also graduated these students at rates that exceeded the schools’ overall graduation rate and A-G completion rate. At Eagle Rock, however, the on-time graduation rate for students with “poor-average” middle school performance was just slightly lower than the school’s overall graduation rate of 59%.

Table 5: More Effective LAUSD Large Comprehensive High Schools with Students with Poor-Average Middle School Academic Performance by On-time Completion and A-G Completion Rates

SCHOOL	Percent Completed HS on Time	Percent Completed A-G	N	N Cohort of First-Time Freshmen
No. Hollywood	62%	25%	337	1019
Cleveland	60%	33%	187	586
Carson	59%	31%	268	989
Reseda	59%	25%	171	647
Franklin	57%	31%	237	778
Narbonne	57%	39%	206	738
Eagle Rock	56%	23%	183	590
Jefferson	56%	24%	333	912

In contrast to the schools listed above, at comprehensive schools that were least effective with first-time freshmen with records of poor-average middle school achievement (not listed), only one-third graduated on time and less than one-tenth graduated with successful A-G completion.

More Effective High Schools with Well-Prepared Students

On average, 65% of students in any given Algebra 1 class in the district will receive either a D or F grade. It is a relatively select group of students that takes and passes Algebra 1 in 9th grade, although the most advanced students take algebra in middle school (as reflected by the relatively small percentage of “well-prepared” students at particular LAUSD high schools). Because of the pivotal role that algebra plays as the “gateway” to more advanced mathematics including those that are required by California’s public universities for admission, understanding which schools (and subsequently, how schools) provide a more effective pathway to on-time graduation with preparation for postsecondary educational opportunities is essential.²²

Table 6 (page 15), lists the 16 comprehensive high schools within LAUSD that are more effective in graduating this group of students on-time and with the successful completion of A-G (69% and 45%, respectively) than the district’s average.

As noted on Table 6, students who pass algebra in 9th grade are a relatively small percentage of the cohort. Among the LAUSD comprehensive high schools listed, Marshall Senior High serves the largest population of students who take and pass algebra successfully in 9th grade (26%). At Marshall, 73% of 9th grade algebra students graduate four years later and 71% graduate with A-G.

At LAUSD, comprehensive high schools that ranked at the bottom of the list (not shown), less than 40% of students who have taken and successfully completed Algebra 1 in the 9th grade graduate on time, and approximately one-fifth graduate with A-G.

²² A number of district and state policies encourage the identification of schools and practices that lead to the successful completion of algebra. For example, starting with the class of 2004, the state of California requires students to complete algebra in order to receive a high school diploma. LAUSD mandates (2003) all 8th grade students to enroll in a one-year or two-year algebra course. More recently, the State Board of Education passed a mandate (July, 2008) that will require 8th graders to be assessed in algebra. California’s testing mandate, which will take effect in 2011, means schools are likely to enroll all 8th graders in introductory algebra, or Algebra 1, to prepare them for the test.

Table 6: More Effective LAUSD Large Comprehensive High Schools with 9th Grade Algebra Completers by On-time Completion and A-G Completion Rates

SCHOOL	Percent Completed HS on Time	Percent Completed A-G	N	N Cohort of First-Time Freshmen
Taft	84%	63%	115	954
No. Hollywood	81%	53%	262	1019
Banning	81%	52%	99	819
El Camino Real	80%	65%	81	990
Eagle Rock	79%	53%	134	590
Monroe	79%	57%	143	1177
Reseda	78%	57%	67	647
Narbonne	76%	64%	114	738
Chatsworth	76%	59%	108	791
Wilson	75%	57%	114	720
Verdugo Hills	75%	51%	61	625
San Pedro	75%	52%	89	839
Kennedy	74%	52%	117	738
Bell	73%	48%	165	1331
Marshall	73%	71%	272	1043
University	71%	49%	35	547

Small Schools Perform Better than Large Comprehensive High Schools

LAUSD small high schools demonstrate greater effectiveness, overall, in enabling similar students toward on-time graduation and A-G completion.

The 36 small high schools that comprised our sample were more likely to be successful with underprepared and well-prepared first-time freshmen, and those with limited English skills than large comprehensive high schools within the district.²³ Seventy-one percent of first-time freshmen attending small schools in 2001-02 graduated on time and 54% completed the A-G sequence of courses, compared to 45% and 22%, respectively, for first-time freshmen attending large comprehensive high schools (and 48% and 25% for students district-wide). With few exceptions, most small schools within LAUSD exceeded the district’s overall on-time graduation rate and A-G completion rates for first-time freshmen who began high school in 2001-02.²⁴

As such, Table 7 lists only those schools that were *most* effective in enabling particular populations to graduate on time, and records their corresponding A-G rates. Some LAUSD small schools, therefore, may have A-G rates that surpass those that are listed.

23 Small schools, for the purposes of this paper, were defined as those schools with an average of fewer than 150 students in each of the four key categories of study (i.e., English learners, low CST 9th grade scores, students with poor middle school records, and students who have passed algebra by 9th grade). Excluded from our sample were very small schools—schools with less than an average of 16 students with data for each of our categories.

24 For example, for those students who scored “below basic” or “far below basic” on 9th grade CSTs, only three schools graduated these students at a rate less than 48%, and four small schools graduated, with A-G, this population of students below the district average of 25%. Similarly, only one small school graduated 9th grade algebra completers at a rate below the overall district average. Four small schools graduated, with A-G, “poor-average” middle school performers at a rate below the overall district average. Small schools were not as effective in enabling first-time freshmen with limited English skills graduate on-time four years later and with A-G as with other populations of students based on academic experiences. Nevertheless, all but two small schools graduated LEP students at a rate that exceeded the district average of 33%, and all but four small schools graduated LEP students, with A-G, at a rate that exceeded the district average of 11% for these students.

Table 7: Most Effective LAUSD Small High Schools by On-time Completion with Corresponding A-G Completion Rates

SCHOOL *	Percent Completing HS on Time	Percent Completing A-G	N	N Cohort of First-Time Freshmen
Limited English Skills				
Foshay Learning Ctr	85%	37%	27	210
King-Drew Med Mag	79%	36%	28	440
SOCES Mag	74%	17%	23	211
Cleveland Human Mag	73%	55%	11	238
Elizabeth Learning Ctr	68%	47%	57	181
Venice for Lang Mag	61%	50%	18	147
Manual Arts Col Prep	61%	22%	18	88
Bravo Medical Magnet	56%	54%	41	449
Roosevelt Math/Sci Mag	53%	20%	15	86
Low Standardized Test Scores				
Poly Math/Sci Mag	87%	42%	31	113
Jordan Math/Sci Mag	85%	54%	39	51
Foshay Learning Ctr	84%	41%	138	210
Fairfax Vis Arts Mag	82%	41%	49	84
SOCES Mag	80%	27%	41	211
San Fernando Math/Sci Mag	79%	46%	39	122
Crenshaw Tch Trn Mag	79%	44%	57	78
Sylmar Math/Sci Mag	78%	37%	51	95
Grant Comm Mag	76%	27%	37	82
Hamilton Human Mag	73%	30%	37	83
Middle School Academic Performance				
Jordan Math/Sci Mag	95%	57%	21	51
Poly Math/Sci Mag	94%	67%	33	113
SOCES Mag	89%	53%	64	211
San Fernando Math/Sci Mag	85%	39%	33	122
Foshay Learning Ctr	83%	42%	59	210
Fairfax Vis Arts Mag	83%	48%	40	84
Pearl Journ/Comm Mag	81%	55%	31	96
Cleveland Human Mag	80%	67%	55	238
Roosevelt Math/Sci Mag	79%	32%	28	86
LACES Mag	78%	74%	69	229
Algebra Completion				
Monroe Law/Gov Mag	96%	89%	27	102
Sylmar Math/Sci Mag	95%	74%	19	95
Poly Math/Sci Mag	93%	73%	45	113
Roosevelt Math/Sci Mag	93%	80%	15	86
SOCES Mag	93%	76%	29	211
San Fernando Math/Sci Mag	93%	53%	40	122
Elizabeth Learning Ctr	91%	78%	23	181
Jordan Math/Sci Mag	91%	73%	22	51
Grant Comm Mag	90%	35%	20	82
Crenshaw Tch Trn Mag	89%	57%	35	78

*Schools serving less than ten students in a particular subgroup are not listed.

In-depth examination of the schools listed above is beyond the scope of this study, however, a cursory glance at LAUSD’s small high schools is instructive. As the schools listed above elucidate, in addition to small size, LAUSD small high schools share other attributes. Many small high schools use a thematic and/or interdisciplinary approach to develop curricula. The theme-based nature of magnet schools, for example, wherein students *choose* to attend a school

based on his/her interest in the theme offered (e.g., humanities, math/science, medical, teacher training, visual arts, journalism, etcetera) might account for the large differences found in on-time graduation and A-G completion rates between the small high schools in the sample and LAUSD's large comprehensive high schools. Students attending small schools have higher attendance rates and fewer dropouts (Wasley et al., 2000); a finding that might be associated with themes and a choice-based process. Further, research on LAUSD magnet schools (Griffin, Allen, Kimura-Walsh & Yamamura, 2007) found that students attending a magnet school had increased access to "college-going resources and greater opportunities to learn."

Many of the small schools listed also serve a diverse population of students in terms of academic preparation, academic experiences, and race and ethnicity. By design, magnet schools provide a racially and ethnically diverse setting. Research suggests that students who attend racially diverse middle schools and high schools complete high school at higher rates than those students who attend racially isolated middle schools and high schools (Silver, Saunders & Zarate, 2008).

"Near A-G" Completion

Approximately one-third of LAUSD's cohort of first-time freshmen in 2001-02 who graduated on time fell short of meeting the A-G requirements by 30 credits or less by the end of four years of high school. These students completed at least 80% of the A-G requirements with grades of "C" or better, but were not eligible for UC/CSU.²⁵ The high incidence of "near A-G" completion sheds light on two key issues within the district and district high schools.

First, that so many graduates district-wide fall short of meeting the A-G requirements by 30 credits or less (three courses) speaks loudly to the need to identify course bottlenecks that prevent A-G completion. Clearly, with 65% of first-time freshmen failing to receive the requisite C or better in Algebra 1, ascertaining best practices in this course is critical.

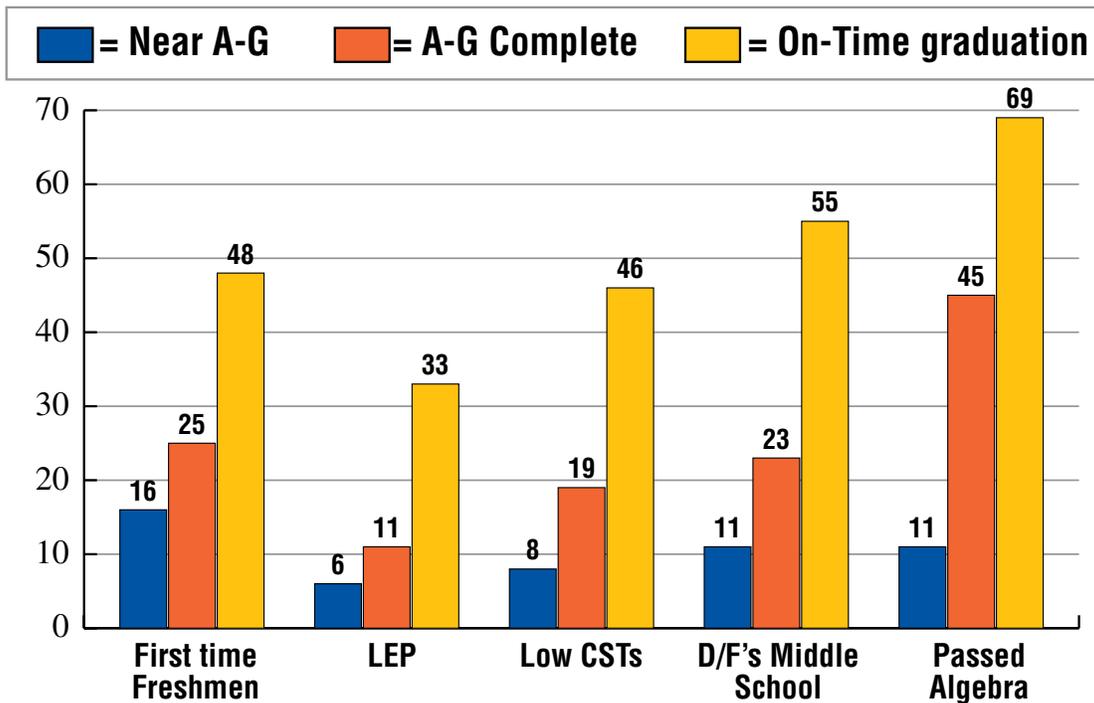
However, Algebra 1 is not the only barrier to A-G completion. Pass rates are only slightly better for other courses: 51% of cohort members receive a D/F grade in Geometry A, 49% in Biology A, 48% in World History A, and 43% receive a D/F grade in English 10A. In the most troubled schools, of course, rates of successful completion (not to mention rates of mastery) are even worse. As such, we must begin to explore the tremendous challenges that students must overcome to meet the A-G requirements in this context.

Second, the district must identify if certain groups of students within district high schools experience these challenges at a greater rate. Our analysis revealed some uniformity across the *district* in terms of who graduates "near A-G." As Figure 2 illustrates, the chance of graduating "near A-G" is comparable among subgroups of students based on academic experiences, with the chance of graduating "near A-G" lowest for students with limited English skills (6%) and slightly higher for those students who earned between two and six Ds and Fs in middle school (11%), and those who successfully complete Algebra 1 by 9th grade (11%). These differences

²⁵ These findings underscore the results of a recent study conducted by the University of California, Transcription Evaluation Service (2007). Across 20 comprehensive high schools within the LAUSD, the study's authors found that 28% of 2005 graduates were two courses short of meeting the A-G benchmarks for admission to a California State University campus with grades of C or better (UC Transcript Evaluation Service, 2007).

become pronounced, however, when we examine corresponding A-G completion rates for each of the subgroups. For students learning English, for example, the chance of graduating “near A-G” is just slightly lower than the chance of graduating with A-G completion (6% and 11%, respectively). This speaks to the overall low rate of A-G completion for English learners throughout the district, and the challenges these students must confront to satisfy the course requirements for entry to the state’s public university system. On the other hand, for those students that successfully complete Algebra 1 by 9th grade, the chance of graduating with A-G completion is four times greater than the chance of graduating “near A-G.”

Figure 2: On Time Graduation Rates, A-G and “Near A-G” Completion Rates, for LAUSD First-Time Freshmen by Academic Experiences



A comparison of LAUSD comprehensive high schools reveals that some schools do a better job of enabling a relatively high percentage of students to graduate with the successful completion of A-G courses, across all subgroups, with few students falling short of meeting A-G by 30 credits or less. Table 8 lists LAUSD comprehensive schools that enabled first-time freshmen, with particular academic characteristics, toward A-G completion at rates that exceeded or approached the district average. At Marshall Senior High, for example, very few first-time freshmen fall short of meeting the A-G requirements (by 30 credits or less) four years later. Indeed, overall, approximately half of Marshall’s cohort of first-time freshmen graduate with A-G completion, and less than 1% (0.8%) graduate having completed 80% of the A-G course requirements. And, as Table 8 demonstrates, low rates of “near A-G” completion were achieved for all subgroups identified. At Dorsey Senior High, 27% of first-time freshmen graduated with the successful completion of A-G, and less than 1% graduate “near A-G.” These numbers remain relatively constant among subgroups based on academic experiences, suggesting Dorsey High is relatively effective in minimizing the gaps between A-G completion and “near A-G” for a wide range of students.

Table 8: A-G and “Near A-G” Completion Rates for LAUSD Large Comprehensive High Schools by Academic Characteristics

SCHOOL	Low 9 th Grade CSTs		Poor Middle School Academic Achievement		Limited English Skills		Successful Completion of Algebra	
	Percent A-G	Percent Near A-G	Percent A-G	Percent Near A-G	Percent A-G	Percent Near A-G	Percent A-G	Percent Near A-G
Marshall	49%	1%	49%	1%	34%	1%	71%	1%
Narbonne	24%	3%	39%	6%	14%	3%	64%	7%
Eagle Rock	25%	9%	23%	14%	12%	6%	53%	15%
Dorsey	32%	1%	34%	2%	26%	1%	39%	1%
Verdugo Hills	23%	8%	20%	13%	15%	10%	51%	7%
Hamilton Complex	19%	11%	22%	12%	12%	8%	43%	13%

In contrast, at a few LAUSD high schools (not listed), a larger percentage of students graduate “near A-G” than with the successful completion of the A-G requirements. These schools tend to be ineffective at providing necessary college preparation for students across all subgroups based on academic experiences, including those students that begin their high school experience well-prepared for academic coursework.

CONCLUSIONS

Findings from value-added analysis demonstrate that LAUSD high schools are vastly different in their effectiveness. Overall, LAUSD’s graduation rate is low and few students graduate prepared for the wide range of postsecondary options including entry to the state’s public university system. Only 48% of LAUSD first-time freshmen who began high school in 2001-02 graduated four years later. And, one-quarter of first-time freshmen graduated with the successful completion of the A-G sequence of courses.

Based on our analysis of LAUSD longitudinal student-level data for first-time 9th graders who were expected to graduate in 2004-05, we found that:

- Only one-third of cohort members who entered the 9th grade with limited English skills and were designated as Limited English Proficient (LEP) graduated four years later. Approximately one-tenth of entering first-time freshmen with limited English skills successfully completed the A-G sequence of courses.
- Less than half (46%) of first-time 9th graders in 2001-02 who scored “below basic” or “far below” basic on either the math or ELA portion of the CST in 9th grade graduated from high school four years. Approximately one-fifth (19%) of first-time 9th graders who scored “below basic” or “far below basic” completed the sequence of A-G courses.
- Of first-time freshmen in 2001-02 who received between two and six Ds and/or Fs in middle school, just over half (55%) graduated from high school on-time, and approximately one-quarter (23%) graduated with the successful completion of A-G course requirements.

- Sixty-nine percent of students who entered the 9th grade well prepared (ready and able to take and pass the first semester of college preparatory algebra) graduated and almost half graduated having completed the A-G requirements successfully.

These findings reveal a strong relationship between the academic experiences of students and on-time high school and A-G completion. Notwithstanding this relationship, our analysis also reveals that pre-high school academic experiences account only for a part of the variation we see in these outcomes across the district. Although first-time freshmen who enter LAUSD high schools with limited English skills, low test scores, and with poor academic records in middle school are among the least likely to graduate from high school, particularly with adequate college preparation, these students stand a far better chance of graduating and completing A-G requirements at some LAUSD high schools than at others.

The data show that some schools add value by enhancing the knowledge, abilities and skills of “similar” students. Specifically:

- An unanticipated assembly of schools comprise the district’s “most effective” when considering on-time graduation and A-G completion rates for similar students based on academic experiences.
- A total of nine large comprehensive high schools enabled English learners to graduate on time and with the successful completion of A-G courses at a rate that exceeded the district average for these students. At Gardena High School and Jefferson Senior High, for example, 48% and 42%, respectively, of first-time freshmen designated as LEP graduated four years later. A few schools enable English learners to graduate with A-G completion at rates that are double those of the district for this population.
- Eight large comprehensive high schools graduated poor CST performers with the successful completion of A-G courses above the district average. Carson, for example, enabled nearly 56% of 9th graders who scored “below basic” or “far below basic” on either the math or English Language Arts portion of the CST to graduate from high school four years later, and more than one-third (35%) graduated with A-G completion. The A-G completion rate at Carson is nearly double the district average of 19% with this population of students.
- Approximately one-third of LAUSD entering freshmen in 2001-02 received between two and six D/F grades in middle school. A critical metric of success for LAUSD high schools, therefore, is the extent to which high schools have success with students who have struggled in their middle school coursework. Of the 47 comprehensive LAUSD high schools in our sample, eight had on-time graduation rates that exceeded the average rates at which the district graduated these students and enabled A-G completion. First-time freshmen with poor middle school records attending Cleveland, and Jefferson Senior High were able to complete high school four years later and complete A-G requirements at rates that significantly exceeded the district average.
- On average, 65% of students district-wide enrolled in Algebra 1 will receive either a D or F grade. Given this high rate of course failure, successful course completion by 9th grade defines a group of students prepared for a rigorous academic course load in high school.

Sixteen comprehensive high schools within LAUSD graduate this group of students with A-G completion at rates that surpass district averages. Taft, Banning, and Bell Senior High are among the schools that top this list.

To gain an understanding of the educational practices associated with the academic growth and success of students attending the schools identified as “more effective” that lead to graduation and A-G completion, additional studies are required. Our analysis of LAUSD’s small high schools and their overall effectiveness compared to the district’s large comprehensive high schools points to small size, thematic and/or interdisciplinary curricula that engage students. In comparing on-time graduation and A-G completion rates, 71% of first-time freshmen attending small schools in 2001-02 graduated on time and 54% completed the A-G sequence of courses compared to 45% and 22%, respectively, for first-time freshmen attending large comprehensive high schools (and 48% and 25%, respectively, for students district-wide). The 36 small high schools that comprised our sample were more likely to be successful with first-time freshmen with limited English skills, those that entered high school underprepared and those that entered prepared for academic success. The district must look into these unique attributes to account for some of the large differences found in on-time graduation and A-G completion rates between the small high schools in the sample and LAUSD’s large comprehensive high schools.²⁶

The identification of best practices is especially critical when we examine the “Near A-G” completion rates of LAUSD high schools. That so many graduates—approximately one-third—fall short of meeting the A-G requirements by 30 credits or less speaks loudly to the need to identify those practices that allow for successful completion. A comparison of LAUSD comprehensive high schools reveals that some schools do a better job of enabling a relatively high percentage of students to graduate with the successful completion of A-G courses, across all subgroups, with few students falling short of meeting A-G by 30 credits or less. At Marshall Senior High, for example, very few first-time freshmen fall short of meeting the A-G requirements four years later, irrespective of prior academic experiences. Indeed, approximately half of Marshall’s cohort of first-time freshmen graduate with A-G completion, and less than 1% (0.8%) graduate having completed 80% of the A-G course requirements, overall and across groups of similar students.

Current test-based accountability measures—AYP and API—cannot capture the impact of these school differences as no attention is paid to the wide range of academic experiences and backgrounds held by first-time freshmen. Unfortunately, standard judgments regarding LAUSD’s “best” high schools continue to rely on these test-based outcomes. The recent release of the 2008 CST results, for example, generated encouragement within the Los Angeles Unified School district: secondary students showed increases in English language arts and mathematics test performance by up to seven percentage points for some levels.²⁷ These gains, however, do not shed light on school-level or district-level practices that have led to these increases.

26 These findings support the LAUSD’s recent passage (June, 2008) of the *Small School II* resolution wherein the district will move toward the implementation of small schools by 2020 and transform existing large schools into campuses of small schools “based on their unique needs to accelerate student achievement” (LAUSD, 2008). These findings also support the *Multiple Pathways* resolution (October, 2008) that will increase opportunities for LAUSD high school students to enroll in a wide representation of pathways programs based on choice and interests, with the overarching goal of preparing *all* students for college and career.

27 Among significant sub-groups, English learners did not achieve any gains: a zero increase in ELA and a one point gain in math.

Despite slight increases throughout the district, these results continue to tell us more about the neighborhood of the school, and the family background and prior educational experiences of those attending the school than the “effectiveness” of the school. The data presented in this study, in contrast, point to the need to closely examine the conditions and practices at “more effective” district schools that lead to critical outcomes—high school graduation and postsecondary preparation—for all students. Understanding which LAUSD high schools add value through increased on-time graduation and A-G completion rates provides students and parents with information that is distinctly more relevant and informative than test scores.

Finally, while we have identified schools that have a greater positive impact on the academic trajectories and success of its students than other district high schools, most district high schools continue to fall short of enabling *all* entering freshmen to graduate and graduate with the courses required for California’s public university system. Nevertheless, these findings can inform efforts within the LAUSD to make graduation from high school prepared for a wide range of postsecondary options the standard for all students.

REFERENCES

- Alexander, K.L., Entwisle, D.R., & Kabbini, N.S. (2001). The Dropout Process in Life Course Perspective: Early Risk Factors at Home and School. *Teachers College Record*, 103, 760-882.
- Allensworth, E. M., & Easton, J.Q., (2007). *What Matters for Staying On-Track and Graduating in Chicago Public High Schools: A Close Look at Course Grades, Failures, and Attendance in the Freshman Year*. Consortium on Chicago School Research at the University of Chicago.
- Alliance for Excellent Education (2007). *In Need of Improvement: NCLB and High Schools*, Washington DC: author. Available at http://www.all4ed.org/files/NCLB_HighSchools.
- Balfanz, R., Herzog, L., & Mac Iver, D.J., (2007). "Preventing Student Disengagement and Keeping Students on the Graduation Path in Urban Middle-Grade Schools: Early Identification and Effective Interventions." *Educational Psychologist*, 42 (4), 223-235.
- Balfanz, R., & Legters, N., (2004). *Locating the Dropout Crisis: Which High Schools Produce the Nation's Dropouts? Where are they Located? Who Attends Them?* Center for Research on the Education of Students Placed At Risk (CRESPAR), John Hopkins University.
- Ballou, D., Sanders, W., & Wright, P. (2004). Controlling for student background in value-added assessment of teachers. *Journal of Educational and Behavioral Statistics*, 29(1), p. 37-65.
- California Department of Education (2008). Program Improvement Status Data Files. Available at: <http://www.cde.ca.gov/ta/ac/ay/tidatafiles.asp>
- De Cos, P.L., (2005). *High School Dropouts, Enrollment, and Graduation Rates in California*. CRB 05-008. California Research Bureau.
- Goldstein, H. et al. (2000). *The use of value added information in judging school performance*. London, Institute of Education.
- Griffin, K.A., Allen, W.R., Kimura-Walsh, E., & Yamamura, E.K. (2007). Those Who Left, Those Who Stayed: Exploring the Educational Opportunities of High-Achieving Black and Latina/o Students at Magnet and Nonmagnet Los Angeles High Schools (2001-2002). *Educational Studies: A Journal of the American Educational Studies Association*. 42 (3), 229-247.
- Hershberg, T., Simon, V.A., & Lea-Kruger, B., (February, 2004). Measuring what matters, *American School Board Journal*, 191(2).
- Hibpshman, T. (2004). *A review of value-added models*. Frankfort: Kentucky Education Professional Standards Board.

- Kane, T.J., & Staiger, D. O., (2002). Volatility in School Test Scores: Implications for Test-Based Accountability Systems. Washington DC: Brookings Institution Press.
- Kelly, S., & Monczunski, L., (2007). Overcoming the Volatility in School-Level Gain Scores: A New Approach to Identifying Value Added with Cross-Sectional Data, *Educational Researcher*, 36(5), pp.279-287.
- Los Angeles Unified School district (2008). Small Schools II: A Bold Vision for the LAUSD. Motions/Resolutions Presented to the Los Angeles Board of Education for Consideration. Available at: <http://www.lausd.k12.ca.us/lausd/board/secretary/entireyearThru6-08.pdf>
- Meyer, R.H. (1996). Value-Added Indicators of School Performance. In Hanushek, E.A., & Jorgenson, D.W., (Eds). *Improving America's Schools: The Role of Incentives*. Washington DC: National Academy Press.
- Mishel, L. & Roy, J. (2006). *Rethinking High School Graduation Rates and Trends*. Washington DC: Economic Policy Institute.
- Neild, R.C., & Balfanz, R. (2006). *Unfilled Promises: The Dimensions and Characteristics of Philadelphia's Dropout Crisis, 2000-2005*. Baltimore: Center for Social Organization of Schools, John Hopkins University.
- Oakes, J. (1985/2005). *Keeping Track: How Schools Structure Inequality*. New Haven: Yale University Press.
- Oakes, J. (1986). *Educational Indicators: A Guide for Policymakers*. Center for Policy Research in Education, The RAND Corporation, Santa Monica, CA.
- Oakes, J., Mendoza, J., & Silver, D., (2007). "California Opportunity Indicators: Informing and Monitoring California's Progress Towards Equitable College Access," in Orfield, Gandara (Eds.), *Expanding Opportunity in Higher Education: California and the Nation*.
- Raudenbush, S.W., (2004). *Schooling, Statistics, and Poverty: Can We Measure School Improvement?* Princeton, NJ: Educational Testing Service; Policy, Evaluation and Research Center.
- Raudenbush, S. W., (Spring, 2004). What are Value-Added Models Estimating and What Does This Imply for Statistical Practice? *Journal of Educational and Behavioral Statistics*, 29(1), pp.121-129.
- Raudenbush, S.W., & Willms, J.D., (1995). The Estimation of School Effects. *Journal of Educational and Behavioral Statistics*, 20(4), pp.307-335.
- Roderick, M.R., (1993). *The Path to Dropping Out: Evidence for Intervention*. Westport, CT: Auburn House.

- Rogers, J.S., (2007). Constructing Success?: Accountability, Public Reporting, and the California High School Exit Exam. *Santa Clara Law Review*, 47(4), 755-784.
- Roy, J. & Mishel, L., (2008). Using Administrative Data to Estimate Graduation Rates: Challenges, Proposed Solutions and their Pitfalls. *Education Policy Analysis Archives*, 16(11). Retrieved October 15, 2008 from <http://epaa.asu.edu/v16n11/>.
- Rumberger, R.W., & Arellano, B., (2007). Student and School Predictors of High School Graduation in California. California Dropout Research Project Report #5, University of California, Santa Barbara.
- Sanders, W.L., & Rivers, J.C., (1996). *Cumulative and Residual Effects of Teachers on Future Student Academic Achievement*. Knoxville: University of Tennessee Value-Added Research and Assessment Center.
- Shavelson, R., McDonnell, L.M. & Oakes, J. (Eds, 1989) *Indicators for Monitoring Mathematics and Science Education: A Sourcebook*. Santa Monica: RAND Corporation.
- Silver, Saunders, and Zarate (2008). What Factors Predict High School Graduation in the Los Angeles Unified School district? California Dropout Research Project. <http://www.lmri.ucsb.edu/dropouts/download.php?file=researchreport14.pdf>
- Univeristy of California All Campus Consortium on Research for Diversity (UC/ACCORD), (2007). *California Educational Opportunity Report*. Institute for Democracy Education and Access (IDEA) and UC/ACCORD, University of California, Los Angeles.
- University of California, (2007). Transcript Evaluation of the Los Angeles Unified School district; Policy Brief. Los Angeles, CA: Communities for Educational Equity.
- Wasley, P.A., Fine, M., Gladden, M., Holland, N.E., King, S.P., Mosak, E., & Powell, L.C., (2000). *Small Schools: Great Strides—A Study of New Small Schools in Chicago*. New York: Bank Street College of Education; www.bankstreet.edu/html/news/smallschools.pdf
- Zarate, M.E. & Gallimore, R.G. (in press). Gender Differences in Factors Leading to College Enrollment: A longitudinal Analysis of Latina and Latino Students. *Harvard Educational Review*, Cambridge, MA.

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