

**How Are High School Students Faring  
in the College Prep Curriculum?  
A Look at Benchmark Data for UC Partner High Schools  
in the University of California's  
School/University Partnership Program**

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## CONTENTS

List of Tables.....	iv
List of Figures.....	vii
Executive Summary .....	ix
I. Introduction .....	1
Organization of the Report.....	2
II. Program History and Background.....	3
Program Descriptions .....	4
Completion of the A-G Requirements .....	6
III. Methodology.....	8
Research Questions.....	9
Analytic and Empirical Strategy .....	9
Two-Pronged Analytic Strategy.....	12
IV. How does A-G Completion in the University Partnership Schools Compare to That in Their Encompassing District?.....	31
V. Who is On Track and Off Track and Why in Completing the Required College Prep Course Sequence? .....	36
Analyzing the Original 1996/97 9th-Grade Cohort.....	36
Analyzing Students From the 1996/97 Cohort Who Stayed at UC Partner Schools .....	40
Analyzing the Original 1997/98 9th-Grade Cohort.....	43
Analyzing Students From the 1997/98 Cohort Who Stayed at UC Partner Schools .....	45
Summary of the Data for the Two 9th-Grade Cohorts.....	47
VI. Do On-Track and Off-Track Patterns Differ By Ethnicity or Other Background Characteristics?.....	48
African American Students.....	49
Hispanic Students .....	50
White Students .....	51
Asians Students .....	53
Other Background Characteristics.....	54
Summary .....	55
VII. Discussion and Conclusions .....	55
Appendix A: Comparison of Demographic and Test Score Information .....	62
Appendix B: Analyses for 1997/98 Ninth-Grade Cohort .....	65

## LIST OF TABLES

1.	English 9 by Spring 1996-97 for 9th-Grade 1996-97 Cohort Students in Partner Schools	
	Table 1.1 by Data Completion.....	16
	Table 1.2 by Ethnicity .....	16
	Table 1.3 by Gender .....	17
	Table 1.4 by LEP Status .....	17
	Table 1.5 by Free/Reduced Lunch Status.....	17
2.	English 10 by Spring 1997-98 for 9th-Grade 1996-97 Cohort Students in Partner Schools	
	Table 2.1 by Data Completion.....	18
	Table 2.2 by Ethnicity .....	18
	Table 2.3 by Gender .....	19
	Table 2.4 by LEP Status .....	19
	Table 2.5 by Free/Reduced Lunch Status.....	19
3.	Algebra I/Integrated Math I by Spring 1996-97 for 9th-Grade 1996-97 Cohort Students in Partner Schools	
	Table 3.1 by Data Completion.....	20
	Table 3.2 by Ethnicity .....	20
	Table 3.3 by Gender .....	21
	Table 3.4 by LEP Status .....	21
	Table 3.5 by Free/Reduced Lunch Status.....	21
4.	Geometry/Integrated Math II by Spring 1997-98 for 9th-Grade 1996-97 Cohort Students in Partner Schools	
	Table 4.1 by Data Completion.....	23
	Table 4.2 by Ethnicity .....	23
	Table 4.3 by Gender .....	24
	Table 4.4 by LEP Status .....	24
	Table 4.5 by Free/Reduced Lunch Status.....	24
5.	Algebra II/Integrated Math III by Spring 1998-99 for 9th-Grade 1996-97 Cohort Students in Partner Schools	
	Table 5.1 by Data Completion.....	26
	Table 5.2 by Ethnicity .....	26
	Table 5.3 by Gender .....	27
	Table 5.4 by LEP Status .....	27
	Table 5.5 by Free/Reduced Lunch Status.....	28
6.	Chemistry by Spring 1998-99 For 9th-Grade 1996-97 Cohort Students in Partner Schools	
	Table 6.1 by Data Completion.....	29
	Table 6.2 by Ethnicity .....	29
	Table 6.3 by Gender .....	30
	Table 6.4 by LEP Status .....	30
	Table 6.5 by Free/Reduced Lunch Status.....	30
Table 7.	A-G Eligibility for 1996/97 9th-Grade Cohort in the Partner Schools and Their Encompassing School District by the End of 12th Grade .....	32

## APPENDIX

### A. 1999-2000 Students in Partner Schools in Grade 12 “In the Grade 9 Cohort” Compared to “Not in the Grade 9 Cohort”

Table A.1	by Demographic Characteristics.....	62
Table A.2	by Gender.....	62
Table A.3	by LEP Status.....	62
Table A.4	by Free/Reduced Lunch Status .....	63
Table A.5	by Previous Stanford 9 Results .....	63
Table A.6	by Reading Percentile .....	63
Table A.7	by Math Percentile.....	64
Table A.8	by Language Percentile .....	64

### B.1 English 9 by Spring 1997-98 For 9th-Grade 1997-98 Cohort Students in Partner Schools

Table B1.1	by Data Completion.....	67
Table B1.2	by Ethnicity.....	67
Table B1.3	by Gender.....	68
Table B1.4	by LEP Status.....	68
Table B1.5	by Free/Reduced Lunch Status .....	68

### B.2 English 10 by Spring 1998-99 for 9th-Grade 1997-98 Cohort Students in Partner Schools

Table B2.1	by Data Completion.....	69
Table B2.2	by Ethnicity.....	69
Table B2.3	by Gender.....	70
Table B2.4	by LEP Status.....	70
Table B2.5	by Free/Reduced Lunch Status .....	70

### B.3 Algebra I/Integrated Math I by Spring 1997-98 For 9th-Grade 1997-98 Cohort Students in Partner Schools

Table B3.1	by Data Completion.....	71
Table B3.2	by Ethnicity.....	71
Table B3.3	by Gender.....	72
Table B3.4	by LEP Status.....	72
Table B3.5	by Free/Reduced Lunch Status .....	73

### B.4 Geometry/Integrated Math II by Spring 1998-99 for 9th-Grade 1997-98 Cohort Students in Partner Schools

Table B4.1	by Data Completion.....	74
Table B4.2	by Ethnicity.....	74
Table B4.3	by Gender.....	75
Table B4.4	by LEP Status.....	75
Table B4.5	by Free/Reduced Lunch Status .....	76

### B.5 Algebra II/Integrated Math III by Spring 1999-2000 for 9th-Grade 1997-98 Cohort Students in Partner Schools

Table B5.1	by Data Completion.....	77
Table B5.2	by Ethnicity.....	77
Table B5.3	by Gender.....	78
Table B5.4	by LEP Status.....	78
Table B5.5	by Free/Reduced Lunch Status .....	79

**B.6 Chemistry by Spring 1999-2000 for 9th-Grade 1997-98 Cohort  
Students in Partner Schools**

Table B6.1	by Data Completion.....	80
Table B6.2	by Ethnicity .....	80
Table B6.3	by Gender .....	81
Table B6.4	by LEP Status .....	81
Table B6.5	by Free/Reduced Lunch Status.....	82

## LIST OF FIGURES

Figure 1	Potential Curriculum Paths in Meeting A-G Requirements.....	11
Proportion of Students From the 1996/97 Cohort:		
Figure 2	Who Left, Did Not Take or Passed 6 Benchmark Courses .....	36
Figure 3	Completing and Passing Math Courses, Grades 9-11 .....	40
Figure 4	Completing and Passing English Courses, Grades 9 and 10.....	41
Proportion of Students from 1996/97 Cohort Who Left, Did Not Take, or Passed 6 Benchmark Courses:		
Figure 5	African American Students .....	49
Figure 6	Hispanic Students .....	51
Figure 7	White Students.....	52
Figure 8	Asian Students .....	53
Proportion of Students From the 1997/98 Cohort:		
Figure B.1	Who Left, Did Not Take, or Passed 6 Benchmark Courses .....	65
Figure B.2	Completing and Passing Math Courses, Grades 9-11 .....	66
Figure B.3	Completing and Passing English Courses, Grades 9 and 10.....	66





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IN THE COLLEGE PREP CURRICULUM?  
A LOOK AT BENCHMARK DATA FOR THE UC PARTNER HIGH SCHOOLS  
IN THE UNIVERSITY OF CALIFORNIA'S  
SCHOOL/UNIVERSITY PARTNERSHIP PROGRAM**

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**Executive Summary**

Policymakers and educators are committed to increasing the competitive eligibility of high school students applying to the University of California (UC) and to increasing the representation of economically disadvantaged and underrepresented students on UC campuses. A core element of the University of California's strategy to accomplish these goals is the School/University Partnership Program (S/UP) with its supportive academic development student programs. Increasing UC eligibility by increasing students' ability to complete UC preparatory coursework is both a key programmatic strategy and a primary goal of the Partnerships. The overarching motivation of the School/University Partnership Program is to advance the rate at which students graduate from high school with a comprehensive educational background that makes them eligible for the University of California. Completion of the A-G required course pattern is the single best indicator of the accomplishment of this objective.

A-G completion, however, is a necessary but not sufficient condition for admission. The application and acceptance process of the UC system requires a series of steps.\* A student must first and foremost complete the required college preparatory A-G course sequence. Then the student must take the SAT-I and the SAT-II. The student must meet the UC eligibility criteria, based on both the SAT scores and the student's grade point average in the required A-G college preparatory course sequence. The student must apply to a campus and also be

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\* [Application and acceptance procedures described in this report are those effective in 2001.]

admitted to that campus. Each of these steps progressively winnows students into the eligibility pool, the applicant pool, and finally, the admission pool.

Completion of the A-G course sequence, however, is the most complicated hurdle for most students advancing from high school to college. It is also a very important indicator of how effective schools are at preparing students for college across all subject areas. The “A-G requirements” include 15 units of high school courses, 7 of which must be taken in the last 2 years of high school. (A unit is equal to 1 academic year or 2 semesters of study).

Policymakers in conjunction with the University of California, Partnership staff, and participating school districts have invested substantial resources in these common goals and programs. As a result, policymakers and educators want to know how high school students are maneuvering, or not, through the UC college prep curriculum in the School/University Partnership schools. The University of California Office of the President (UCOP) has funded a number of research and evaluation efforts to investigate and evaluate the effects of these program efforts.

This report in particular establishes the A-G completion rates and course-taking patterns for a group of urban UC School/University Partnership schools in a large urban school district in California. The work was conducted in collaboration with this large district, which is one of the few in the state that made early and substantial investments in longitudinal data and, as a result, made studies such as this one possible. The purpose of the study is not to evaluate the effects of the S/UP Program, but to be descriptive and informative so as to assist in program planning and future evaluation efforts. These data clarify the nature of the problems that must be systematically addressed and begin to identify actual baseline trends against which future goals can be realistically established. These data are crucial for Partnership, Partner school, and school district staff in understanding the basic issues and potential solutions for increasing UC eligibility and increasing UC preparatory course taking.

### **Research Questions**

Four general research questions are addressed in this report:

- How does A-G completion for students in the School/University Partnership schools compare to A-G completion for students in the other schools in their encompassing school district?

- What proportion of students in the UC Partner schools are on track and off track in completing six key A-G requirements by particular grade levels, referred to as benchmark courses?
- What are the primary reasons for students being off track in completing the six key A-G course requirements?
- Do the on-track and off-track patterns differ by ethnicity or other background characteristics within the UC Partner schools?

## **Methodology**

To understand how many students are on track and where along the curriculum path from 9th through 12th grade students systematically fall off track, we mapped out the basic steps a student has to take to become A-G eligible beginning in 9th grade. To be UC-eligible by the 12th grade, a student must complete the 15 units in the A-G required course sequence, 7 units of which must be taken in the last 2 years of high school. To successfully complete these requirements, there are courses a student must complete, and pass with a C, in the first 2 years of high school because many of the required A-G courses build on each other. For example, a student must complete and pass Algebra I before taking Geometry and pass both of these mathematics courses before taking Algebra II.

In mapping out the 15 A-G requirements, we identified four key courses that need to be completed by the end of the first 2 years of high school and two key courses that need to be accomplished by the 11th grade to allow a student the time and opportunity in the last 2 years of high school to complete and pass the additional 7 units of A-G courses. These six key courses that need to be taken and passed with a C or better have been defined as “benchmark courses” by the University of California. They are Algebra I (or its equivalent) and college prep English 9 by the end of 9th grade; Geometry (or its equivalent) and college prep English 10 by the end of 10th grade; and Algebra II (or its equivalent) and Chemistry by the end of 11th grade. These six key benchmark courses, two at each grade level, thus mark whether a student is on track in a particular subject—mathematics (the “C” requirement), English (the “B” requirement), and the sciences (the “D” requirement)—as well as on track overall in the A-G sequence.

These six benchmark courses also indicate whether a student is definitely on track, possibly on track, or definitely off track toward completing the A-G sequence given his or her current grade level and the traditional timing of high school courses. These benchmark courses are not an absolute in defining who will be eligible. There

are different course choices that students can make for each of the subject requirements (i.e., taking Physics instead of Chemistry as their second year of Lab Science). There are also many paths that students can take to achieve A-G completion by the end of 12th grade. For example, students can double up on courses in later years, repeat and make up courses during the summer months, and lengthen the time that they spend in any given grade to increase the time that they have in high school to complete the courses they need. Additional research is being conducted to understand the myriad other paths that students take to achieve A-G eligibility, the likelihood of these paths, as well as their probabilities for success in achieving A-G eligibility.

To investigate A-G completion and the six key A-G course requirements, referred to as the benchmark courses or the “benchmarks,” in light of the aforementioned research questions, we analyzed two cohorts of new 9th-grade students during their 7th- through 12th-grade years—one cohort of 9th graders in 1996/97 and one cohort in 1997/98. The district generously made available for these analyses student-level data for the 1996/97 and 1997/98 cohorts of 9th graders with data covering student demographics (Free/Reduced Lunch status, ethnicity, gender, etc.), language information (bilingual, English only, currently LEP, previously LEP), and course-taking behavior and course grades from 7th, 8th, 9th, 10th, 11th, and 12th grades. This required student-level district data from 1994/95 until 1999/00. Analyzing two cohorts of data allows us to investigate the stability of our findings and conclusions.

We calculated whether students were A-G eligible or competitively A-G eligible. A-G eligibility is based on a student completing the 15 units in the UC-approved A-G course requirements by the end of 12th grade, of which 7 units must be taken in the last 2 years of high school. There were several nuances concerning what constituted a “UC-approved course” for the different A-G requirements, particularly the D requirement. Clarifications and discussions with UCOP and district staff allowed us to program these specific nuances and differences as part of the code for calculating A-G eligibility. Competitive A-G eligibility is based on a student having a grade point average (GPA) of 4.0 or above in her A-G courses taken in the 10th, 11th, and 12th grades. A “typical” student in the top two tiers of UCLA’s applicant pool earned a grade point average of a 4.0 or above. These definitions are laid out in the UC admission criteria. We also constructed separate variables for each of the six benchmark courses indicating whether a student (a)

completed both semesters of the course with a B or better; (b) completed both semesters of the course with a C or better (i.e., passed the course); (c) completed both semesters of a course with any grade—A, B, C, D, or F—in both semesters (i.e., completed the course); (d) was enrolled in/took both semesters of the year-long course but did not receive a grade (i.e., took, but did not complete); (e) did not take the course; or (f) left the set of UC Partner schools in the given district in a given year. A student was considered to have “met the benchmark” for a particular course if he or she passed both semesters of the key course with a C or better by the end of the specified year. Moreover, these variables allowed for the calculation of two additional variables: (g) number of students who completed both semesters with a D or F, and (h) the number of students who passed both semesters with a C.

With these variables, we analyzed two populations of students. First, we analyzed data for the original 9th-grade cohort, including a category for those students who left the set of Partner schools in their given district. Overall, these analyses provide a picture of what percentage of students, overall, starting with a given set of schools, achieved A-G eligibility; what percentage of students from the starting population of students (i.e. the cohort) were on track and off track towards completion along the way; and, importantly, what percentage of students left the set of Partner schools each year. These analyses provide a full picture of the mobility of high school students in the UC Partner schools.

Second, we analyzed data for only those students who stayed at the set of UC Partner schools. These analyses provide a picture of how well students were staying on track, or falling off track, towards A-G completion when they had attended the Partner schools for their entire high school careers. These analyses are key since these are the true population of students that the schools are educating, guiding, and ultimately accountable for.

Since UC Partner schools are ultimately judged by their 12th-grade graduate population, and because schools have the largest influence on students who have attended their school for 4 years, analyzing *both* of these populations is important and provides different, but key, pieces of information for schools, districts and the state. Results from both sets of these analyses are presented below. More research and analysis is still needed to better understand the mobility of high school students and its impact on course-taking and reaching UC-eligibility.

## Results

Overall, we found that a very small percentage of the original 9th-grade cohort students stayed on track for each of the benchmarks individually, and even fewer stayed on track when the benchmark courses were analyzed collectively. We found that 14.4% of the original 9th-grade cohort in 1996/97 (which consisted of 14,390 students in the UC Partner schools) were on track at the end of 9th grade in both English and math college prep courses, and only 7.3% of the original cohort were still on track in the English and math series at the end of 10th grade. In the end, a total of 5.0% of the original 9th-grade cohort were A-G eligible by the end of 12th grade. They were 726 in number, and they were primarily Hispanic students—4.8% Asian, 15.6% African American, 73.0% Hispanic, 5.8% White, 0.1% Pacific Islander, 0.4% American Indian, and 0.3% Filipino. The majority were female—62.8%. Most were eligible for Free/Reduced Lunch in 9th grade—78.2%. Finally, a substantial number were also limited English proficient (LEP) in 9th grade—18.6%.

Interestingly, we found that, in the encompassing school district, 7.2% of the original 9th-grade cohort from 1996/97 (which consisted of 48,589 students) were eligible by the end of 12th grade. Therefore, the overall A-G completion rate in the UC Partner schools (5.0%) is lower than that in the encompassing district (7.2%). This difference was expected because research indicates that students in poverty or of Hispanic or African American descent have low eligibility rates. And the UC Partner schools have a higher concentration of students in poverty and a larger proportion of Hispanic and African American students than schools in the encompassing district.

By further investigating A-G completion rates for the original cohort of 9th graders by ethnicity, we revealed that the eligibility rates for White, Asian, and Hispanic students, but not African American students, were higher in the UC Partner schools than in their district. However, because Hispanic students, the largest ethnic group in the UC Partner schools, have a lower eligibility rate than other ethnic groups, the UC Partner schools have a lower overall eligibility rate, as a whole, compared to the encompassing district.

Also, we assessed how many of the A-G eligible students were competitively eligible. We found that, overall, in the UC Partner schools, 0.6% of the original 9th-grade cohort achieved competitive A-G eligibility by the end of 12th grade; this is 82 out of 14,390 students. In the UC Partner schools' encompassing school district, 1.1%

of the original 9th-grade cohort was competitively A-G eligible by the end of 12th grade; this is 531 out of 48,589 students. The average A-G 10-12 weighted GPA for the competitively eligible students in the UC Partner schools was 4.17; for the competitively eligible students in the encompassing district, the average GPA was similar at 4.22. This indicates that the competitively eligible students in the UC Partner schools are of the same caliber as those in their encompassing district (this is by definition because of the small numbers of students).

Additionally, because so few UC Partner school students stayed on track, the majority (95%) of the students in the original 9th-grade cohort in the UC Partner schools were not successfully completing the college prep curriculum and were not achieving A-G eligibility by the end of 12th grade. There were two main reasons that systematically kept students from becoming A-G eligible by the end of 12th grade at the UC Partner schools. First, a substantial number of students left the set of UC Partner schools over the course of high school (48.9% of the 9th-grade cohort). Second, of those students who remained at the UC Partner schools, many did not even attempt to take the A-G courses. We found that in 9th grade, of those who stayed at the UC Partner schools, 33.5% of the cohort did not take the UC-approved English 9 course by the end of 9th grade, and 55.5% did not take Algebra I, or its equivalent, by the end of 9th grade. Remember that these calculations assess whether a student completed a course by the end of a certain grade level. If a student, for example, completed Algebra I in the 8th grade then she was included in those that completed Algebra I by the end of 9th grade. By the end of 10th grade, of those who stayed, 19.7% did not take English 10, and 67.8% did not take Geometry. By the end of 11th grade, of those who stayed, 67.8% did not take Algebra II and 63.7% did not take Chemistry. Thus, leaving the set of Partner schools and not taking the A-G courses are the primary reasons that keep students from achieving A-G eligibility.

To cross-check our findings, we replicated these analyses for the original (1996/97) 9th-grade cohort of students in the 1997/98 cohort and cross-checked our results with secondary data sources. The 1997/98 cohort analyses replicated the results we present here for the 1996/97 data. Specifically, we found similar patterns in competitive A-G eligibility, A-G eligibility, and course-taking patterns for the 1996/97 and 1997/98 cohorts of 9th graders. Furthermore, the number of students who applied to the UC based on secondary data sources and our calculated number of students who were A-G eligible the year before as seniors were found to be

similar. Specifically, we found a similar number of students to be A-G eligible by 12th grade by our calculations as compared to the number of students reported by UCOP as applying to the UC the next fall. We checked these numbers for both the set of UC Partner schools and for the encompassing district; both sets of numbers were similar. These comparisons confirmed that our computations and calculations were valid.

In sum, in both cohorts of data, we found that a large majority of the students in the UC Partner schools were not successfully completing the college prep curriculum. For the students who remained at the UC Partner schools, we also found that there were large disparities in the number of students who took the A-G courses and those who completed them with passing or competitive grades.

Importantly, we also found that these disparities in taking and completing the key courses were even larger for males and LEP students. Particularly, LEP students had a more difficult time taking and completing the English benchmarks. By ethnicity, we found that African American students did not take or complete Algebra I at as high a rate as Hispanic students. Also African American students' pass rates for Algebra I, English 9, and English 10 were lower than those of Hispanic students. The taken, completion, and passing rates for African American and Hispanic students were similar (and very low), however, for the upper division benchmark courses of Algebra II and Chemistry.

## **Discussion and Conclusions**

These findings raise many issues of concern for the University of California, UC Partner schools, and the districts. We mention a few of the most obvious here. First, schools cannot afford to have so many students fall off track toward A-G completion in the early years of high school because of the natural winnowing effect of each of the 15 A-G requirements. The A-G courses in all the subject areas build on each other. As a result, fewer and fewer students are ready and prepared to enroll in the required courses in each subject as they move through the grade levels. Students need to be attempting the A-G courses at the given grade levels, and more importantly, they need to be prepared to take and pass the A-G college preparatory courses at each grade level. Being prepared to take English 9 and Algebra I by the end of 9th grade, as a first step, is therefore vital. This points to the importance of middle school preparation and instruction as a first avenue for schools. Being ready



for the high school college prep curriculum is crucial if students are to stay on track during high school and to attain A-G eligibility by 12th grade.

The need for stronger middle school preparation has been broadly recognized by the UC and the Partner schools. Monies have been directed toward the entire K-12 pipeline structure and are being managed by the outreach programs supported by the University of California and the Partnership schools. However, these efforts need to be coupled with an urgency and with concerted action because of the current economic and political pressures surrounding the outreach monies. Legislators need to fully understand the need for middle school preparation and completion of Algebra I and English 9 courses by the end of 9th grade as well as how these relate to UC eligibility.

Second, along with creating a sense of urgency and action for stronger middle school preparation, Partnership programs, in collaboration with their districts, need to consider how they could better use data such as those reported here to inform their efforts. Discussing specific data on who is meeting and not meeting crucial college prep courses would provide important diagnostic and guidance insights to support action. The benchmark data provided in this report could assist the Partnerships, their schools, and the districts in delivering an important message on the need for stronger middle school preparation, as well as additional assistance in academic guidance. These benchmark data highlight the specific target populations for academic guidance and development not just for the 9th grade, but across all grades, 9 through 12. The benchmark data indicate the specific numbers of students in different predicaments on the path toward A-G completion. For example, the data identify the number of 9th graders who passed Algebra I in 8th and 9th grades, but who are having trouble completing or passing English 9 by the end of 9th grade. They identify those students who are on track in math, but not in English at the end of 9th grade or the end of 10th grade. They identify the large number of students who are not enrolled in Algebra I or English 9 by the end of 9th grade. They also identify the students who enrolled in, but did not complete, Algebra I or English 9 with a grade or with a passing grade by the end of 9th grade. Overall, these types of benchmark data are very important for the university, districts, schools, counselors, and UC Partnerships to understand in their efforts to assist their schools and students in achieving A-G eligibility and UC eligibility. In general, these types of information assist the school staff and the Partnership practitioners in identifying which trends of course-taking patterns exist at their school and, more important,

which groups of students need attention in pursuing A-G eligibility and ultimately UC eligibility.

Furthermore, the UC Partnerships and their districts need to consider feasible options for helping students who are not on track to catch up that complement and support the guidance already in place at the schools and districts. Additional University collaboration in this area may also show future benefits.

Third, in addition to the students who are not enrolling and completing the A-G courses, there are many students not passing the A-G course with competitive grades. Of those students who were enrolled in the A-G courses, there were large disparities in the numbers of students who completed a course and completed the course with passing or competitive grades by a given grade level. Pass rates for those who completed the courses were very low. Students not learning the material in the A-G courses is also keeping them from meeting the benchmarks (individually and collectively). English pass rates for those who completed the English courses were 50% for English 9 and 67% for English 10, and math pass rates for those who completed the math courses were roughly 48-58% for Algebra I, Geometry, and Algebra II. Passing with a C is also a minimum. Most students will need at least a B, or better, to be admitted to a UC campus, particularly at the more competitive schools like UCLA and Berkeley.

Fourth, it is very important to recognize that the A-G completion rates by ethnicity for Hispanic, White and Asian students, but not African American students, were higher in the UC Partner schools than in their district. This suggests that as a group, Asian, White and Hispanic students are performing better in the UC Partner schools than in their district. Despite this finding, the UC Partner schools still need to expand their efforts and increase the overall number of underrepresented minority students achieving A-G eligibility and competitive A-G eligibility, even though their Hispanic, White, and Asian high school students are faring as well as, or slightly better than, students of the same ethnic backgrounds within their encompassing district.

Finally, there is a strong need for additional collaborative research that can provide a more realistic, concrete view of how many and what type of students are leaving the set of UC Partner schools and what type of students are not taking the A-G courses. The numbers of students who are leaving the set of UC Partner schools and those that are not taking the A-G required courses are sizeable and should be a

concern for the University of California, its Partner schools, and their districts. Therefore, we are currently investigating what types of student characteristics and behaviors lead to (or predict) not taking a necessary A-G requirement (such as Algebra I or the Lab Science requirement), not completing both semesters of a necessary course, or not passing both semesters of a necessary course with a B or better. Moreover, we are interested in additional collaborative research that could inform improvement in the quality of A-G courses and their effectiveness for students—for example, studies relating teacher characteristics and knowledge levels to course quality and performance. Such studies could help us to understand and improve professional development for teachers in key subject matter courses. Both outlining the predictors of these patterns and improving on the professional development of teachers in key subject areas can help schools and districts better serve their students along the way toward A-G completion and UC eligibility.

In summary, the course-taking patterns outlined in this report provide a first step in setting the stage for gaining a set of diagnostic tools to be used both to increase the number of students on track and to keep students on track towards achieving A-G eligibility by the end of 12th grade. These data reveal that mobility and not taking or completing the A-G courses have resulted in very small percentages of students staying on track and attaining A-G completion by the end of 12th grade. As a result, the UC Partner schools need to focus even more on preparing students in the early grades (7th through 9th grades) for the high school college prep curriculum, particularly for successful completion of Algebra I and English 9 by the end of 9th grade. Schools also need to focus on guiding students toward options that help them double up courses, skip electives, and use the summer months as a bridge. Timing of courses, particularly in the mathematics college prep sequence and the English sequence for LEP students, is crucial. Additionally, despite the very small numbers of students in the UC Partner schools who attained A-G completion by the end of 12th grade, the A-G eligibility rates for Hispanic, White, and Asian students, but not African American students, were higher in the UC Partner schools than in their encompassing school district. Finally, these results represent the starting point from which future improvements should be expected. Benchmarks for A-G course requirements are basic indicators of success, and the UC system, its Partner schools, and school districts should see themselves as jointly accountable for increasing current rates.



**HOW ARE HIGH SCHOOL STUDENTS FARING  
IN THE COLLEGE PREP CURRICULUM?  
A LOOK AT BENCHMARK DATA FOR THE UC PARTNER HIGH SCHOOLS  
IN THE UNIVERSITY OF CALIFORNIA'S  
SCHOOL/UNIVERSITY PARTNERSHIP PROGRAM**

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**I. Introduction**

Policymakers and educators are committed to increasing the competitive eligibility of high school students applying to the University of California and to increasing the representation of economically disadvantaged and underrepresented students on UC campuses. A core element of the University of California's strategy to accomplish these goals is the School/University Partnership Program (S/UP) with its supportive academic development student programs. Increasing UC eligibility by increasing a student's ability to complete UC preparatory coursework is both a key programmatic strategy and a primary goal of the Partnerships.

Policymakers in conjunction with the University of California, Partnership staff, and participating school districts have invested substantial resources in these common goals and programs. As a result, policymakers and educators want to know how high school students are maneuvering, or not, through the UC college prep curriculum in the School/University Partnership schools. The University of California Office of the President (UCOP) has funded a number of research and evaluation efforts to investigate and evaluate the effects of these program efforts.

This report in particular establishes the A-G completion rates and course-taking patterns for a group of urban UC School/University Partnership schools in a large urban school district in California. The purpose of the study is not to evaluate the effects of the S/UP Program, but to be descriptive and informative so as to assist in program planning and future evaluation efforts. These data clarify the nature of the problems that must be systematically addressed and begin to identify actual baseline trends against which future goals can be realistically established. The data are crucial for Partnership, Partner school, and school district staff in understanding

the basic issues and potential solutions for increasing UC eligibility and increasing UC preparatory course taking.

### **Organization of the Report**

This report has seven sections. This first section is an introduction. Section II briefly summarizes the history of the UC programs and provides background information. Section III outlines the research questions, the data, and methodology. The next two sections (sections IV and V) outline the results. First, we describe how completion rates for the UC-specified courses known as the “A-G requirements” at the UC Partner schools compare to the completion rates in their encompassing school district. Next, we investigate the proportion of students at the UC Partner schools who are “on track” and “off track” in regard to completing the required college prep curriculum by the end of certain grade levels and point out the main reasons why students are off track. In section VI, we investigate these patterns by ethnicity and other background characteristics. In the final section (VII), we discuss the findings and conclude two main points. First, mobility and not taking or completing the A-G courses resulted in very small percentages of students staying on track and attaining A-G completion by the end of 12th grade. As a result, the UC Partner schools need to focus even more on preparing students in the early grades (7 through 9) for the high school college prep curriculum, particularly Algebra I and English 9. Schools also need to focus on guiding students toward options that help them double up courses, skip electives, and use the summer months as a bridge. Timing of courses, particularly in the mathematics college prep sequence and the English sequence for LEP students, is crucial. Second, despite the very small numbers of students in the UC Partner schools who attain A-G completion by the end of 12th grade, the A-G eligibility rates for Hispanic, White, and Asian students, but not African American students, were higher in the UC Partner schools than in their encompassing district.

This report complements the current evaluation(s) of the Educational Outreach and K-12 Improvement Programs and aims to increase the state’s, districts’, and schools’ understanding of how students maneuver within California high schools serving large numbers of educationally disadvantaged students and how they stay on track for maintaining eligibility for applying to a UC university. It is the first step in addressing students’ progression through California’s public education system with attention to the role of outreach.

## II. Program History and Background

In 1995, the University of California Board of Regents adopted a policy, known as SP-1, to eliminate consideration of race, ethnicity, and gender in University admissions. It stated specifically that “the University of California shall not use race, religion, sex, color, ethnicity, or national origin as criteria for admission to the University or to any program of study.” A majority of California’s voters adopted a stance similar to the Regents’ with the passage of Proposition 209 in November 1996, which eliminated the consideration of race, ethnicity, and gender in public employment, public contracting, and education. In effect, Proposition 209 provided constitutional backing for the UC Board of Regents’ decision in 1995 to implement SP-1. Though the University of California has had a long-standing commitment to educating California’s diverse population, the rethinking of affirmative action policy has brought a range of substantial changes to the way the University considers its responsibility to educationally disadvantaged students.

For many years, the University has been actively involved in providing academic enrichment programs that bridge secondary and postsecondary education. These programs have developed on each of the 10 University of California campuses and within the Office of the President, which serves as the administrative center of the University system. However, since 1995, the programs and the challenges they face have been redefining themselves in the light of the policy shift.

In particular, over the past several years, the University has implemented newly designed outreach efforts directed to K-12 schools that raise specific challenges with regard to education reform. These newly designed strategies are known as UC’s K-12 outreach activities.

The UC’s K-12 outreach activities are an integrated effort of activities, with the School/University Partnership Program (S/UP) at the core of its longer term strategy.<sup>1</sup> The UC has embarked on a short-term and a long-term strategy. In the short term, various policies and practices have been modified to potentially increase the admission and enrollment numbers of underrepresented minorities, such as the implementation of the “4 percent plan” and the dual admissions plan, as well as changing the admission selection decision process. In the longer term, because of the

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<sup>1</sup> The unit of analysis is the school. As is assumed by the Partnerships and the legislature, all students attending a UC Partner school are considered in the S/UP Program, regardless of how long a student has been attending the school.

amount of time it takes for changes in K-12 to yield changes in admission to colleges and universities, the UC has also strongly supported the S/UP Program and the student academic development programs, EAOP, MESA, Puente and AVID.

### **Program Descriptions**

The S/UP Program was designed to assist schools with the development of systemic educational change, focusing on teacher training, educational leadership, and curriculum development. It was established in late 1998, following the recommendations of the Outreach Task Force of the University of California. The Task Force envisioned a set of UC Partner schools for each of the UC campuses whereby educationally disadvantaged students would benefit from comprehensive reform strategies that would be launched, over time, by the schools in partnership with UC Outreach staff. Schools that consistently performed in the lowest two quintiles of educational achievement statewide on the state's standardized testing program (STAR system) were selected as UC Partners.

The S/UP Program was designed with the flexibility to accommodate the needs of schools and the strengths of campus programs. The implementation of the School/University Partnership consists of varied education reform strategies that are agreed to by the Partner school and University staff. In all cases, the program combines a set of educational interventions around teacher professional development, curricular reform, and the development of educational leadership. Some Partnerships include specific new courses, tutoring, and technology-based initiatives. In all cases, the UC Partner schools are developing strategies to increase the college-going rates of students. The strategies vary by grade span, but all seek to increase the educational achievement patterns that ultimately lead to successful completion of the University of California A-G admission requirements. In some sites, UC programs have existed for many years, and the formalization of the Partnership has resulted in coordinated services that include those programs with a history at the school site.

In most cases, the School/University Partner is supported by a site liaison, hired by the University. The liaison helps coordinate the services of the University campus with the senior administration and teachers of the UC Partner school as a way of aligning the school's program goals with the strengths of the University's services. An example might be the coordination of math professional development programs offered by the University with a school objective of offering algebra



instruction to all students. In all cases, the liaison assists in the development and utilization of data-sharing agreements that allow the UC Partner school and the University to assess progress during the course of the year.

Additionally, the S/UP Program was envisioned to integrate the existence of the other UC academic development programs that might be present at the UC Partner school. These academic development programs are described below.

*Early Academic Outreach Programs (EAOP)*—Programs designed to support academic enrichment and informational access for students interested in higher education. Programs range from early grades through high school and are generally targeted to educationally disadvantaged students.

*Mathematics, Engineering, Science Achievement (MESA)*—A student-based enrichment program designed to supplement educational achievement in mathematics and science, working with students in high schools across the state.

*Puente*—An intensive multi-year literacy program in high schools that promotes the involvement of students, families and the community in the development of educational achievement and college-going aspirations.

*Advancement via Individual Determination (AVID)*—A comprehensive program that combines many components of academic enrichment and informational access with systematic curriculum improvement and professional development. It provides intensive student support in study skills, college student mentor-tutors, test preparation, college information, family involvement, and motivational activities. Programs range from middle school grades through high school and are generally targeted to educationally disadvantaged students.

*California Subject Matter Projects (CSMP)*—An extensive series of nine curriculum-based programs throughout the state that work with subject-specific teacher specialists in the development of teaching and curriculum development.

UC Partner schools may have all of these UC academic programs or different mixes of them based on the needs of the UC Partner school. EAOP and CSMP are the most common among all UC Partner schools. In all cases, the motivation of the School/University Partnership Program (S/UP) is to advance the rate at which

students graduate from high school with a comprehensive educational background that makes them eligible to the University of California. Completion of the A-G required course pattern is the single best indicator of the accomplishment of this objective.

### **Completion of the A-G Requirements**

A-G completion, however, is a necessary but not sufficient condition for admission. The application and acceptance process of the UC system requires a series of steps. A student must first and foremost complete the required college preparatory A-G course sequence. Then the student must take the SAT-I and the SAT-II. The student must meet the UC eligibility criteria, based on both the SAT scores and the student's grade point average in the required A-G college preparatory course sequence. The student must apply to a campus and also be admitted to that campus. Each of these steps progressively winnows students into the eligibility pool, the applicant pool, and finally, the admission pool.

Completion of the A-G course sequence is the most complicated hurdle for most students advancing from high school to college. It is also a very important indicator of how effective schools are at preparing students for college across all subject areas. The "A-G requirements"<sup>2</sup> include 15 units of high school courses, 7 units of which must be taken in the last 2 years of high school. (A unit is equal to 1 academic year or 2 semesters of study.)<sup>3</sup>

The 15 units of high school college prep coursework are as follows<sup>4</sup>:

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<sup>2</sup> Beginning with applicants who are in the fall 2003 entering class, the subject A-F requirements will be known as the A-G requirements. They will then include 1 unit of coursework in visual and performing arts (dance, drama/theater, music, or visual arts). The number of college preparatory electives required will be reduced from 2 units to 1, so that the total number of subject requirements will remain at 15. Also, the visual and performing arts requirement will be labeled the "F" requirement, and the college preparatory elective requirement will be labeled the "G" requirement. The college preparatory required sequence will then be known as the A-G requirements instead of the A-F requirements. This report will use the term "A-G requirements"; however, the analyses of the students' course-taking patterns using the 1996/97 and 1997/98 9th-grade cohorts are conducted using the "old" A-F requirements, as these are the requirements that pertain to their eligibility.

<sup>3</sup> To be accepted by the University, the courses taken to satisfy the A-G requirements must appear on the school's official University of California certified course list. Courses must be listed on students' transcripts as they appear on the certified course list. The course lists for all high schools in California can be found at [www.ucop.edu/pathways/infoctr/doorway\\_index.html#a-f](http://www.ucop.edu/pathways/infoctr/doorway_index.html#a-f)

<sup>4</sup> See *University of California Interactive Guide, General requirements by subject area*. Retrieved December 4, 2002, from [http://pathstat1.ucop.edu/ag/a-g/a-f\\_reqs.html](http://pathstat1.ucop.edu/ag/a-g/a-f_reqs.html)

**A History/Social Science—2 years required.**

Two years of history/social science including one year of U.S. history or one-half year of U.S. history *and* one-half year of civics or American government; and one year of world history, cultures, and geography.

**B English—4 years required.**

Four years of college preparatory English that include frequent and regular writing and reading of classic and modern literature. Not more than 2 semesters of 9th-grade English can be used to meet this requirement.

**C Mathematics—3 years required, 4 recommended.**

Three years of college preparatory mathematics that include the topics covered in elementary and advanced algebra and two- and three-dimensional geometry. Approved integrated math courses may be used to fulfill part or all of this requirement as may math courses taken in the 7th and 8th grades that the high school accepts as equivalent to its own math courses.

**D Laboratory Science—2 years required, 3 recommended.**

Two years of laboratory science providing fundamental knowledge in at least two of these three disciplines: biology (which includes anatomy, physiology, marine biology, aquatic biology, etc.), chemistry, and physics. Laboratory courses in earth/space sciences are acceptable if they have as prerequisites or provide basic knowledge in biology, chemistry, or physics. The appropriate two years of an approved integrated science program may be used to fulfill this requirement. Not more than one year of 9th-grade laboratory science can be used to meet this requirement.

**E Language other than English—2 years required, 3 years recommended.**

Two years of the same language other than English. Courses should emphasize speaking and understanding, and include instruction in grammar, vocabulary, reading, and composition. Courses in language other than English taken in the 7th and 8th grades may be used to fulfill this part of the requirement if the high school accepts them as equivalent to its own courses.

**F Visual and performing arts—1 year required.**

One year of either dance, drama/theater, music or visual arts is acceptable.

**G College Preparatory Electives—1 year required.**

One year (2 semesters), in addition to those required in the “A-F” categories above, chosen from the following areas: visual and performing arts, history, social science, English, advanced mathematics, laboratory science, and language other than English (a third year in the language used for the “E” requirement or two years of another language).

In addition to taking and completing the requisite A-G courses with a grade of at least a C, to be eligible a student must attain a certain grade point average in the A-G subjects that is determined on a sliding scale based on the student's scores on the SAT-I (or the ACT) and the SAT-II. For example, students with A-G GPAs of at least 3.29 are UC-eligible as long as their combined test score on the SAT-I and SAT-II is at least 3320, whereas students with A-G GPAs of 3.0 are required to have a combined test score of at least 3840. In calculating the A-G GPAs, the University also assigns extra points for up to 4 units of University-certified honors-level and Advanced Placement courses taken in the last 3 years of high school. No more than 2 years of UC-approved honors-level courses taken in the 10th grade may be given extra points. A grade of a D in an honors or Advanced Placement course does not earn extra points. The combined test score total equals (SAT-I composite score) + [2 x (SAT-II Writing Score + SAT-II Mathematics score + third required SAT-II score)]. The SAT-I composite is the highest combined mathematics and verbal score from a single sitting. Highest individual SAT-II scores from any sitting are considered.

Also to be UC eligible, a student must take the three SAT-II tests including writing, mathematics Level 1 or 2, and one test in one of the following areas: English literature, foreign language, science, or social studies. However, students are not required to attain specific scores on these tests; they are only required to take them. (The SAT-I is the basic verbal and mathematics tests; the SAT-II are the optional subject matter tests.) Refer to the following Web site for details and a further explanation of these eligibility and admissions criteria: [www.ucop.edu/pathways/impinfo/freshx.html](http://www.ucop.edu/pathways/impinfo/freshx.html).

Overall, A-G completion is a basic eligibility requirement that is necessary but not sufficient for UC eligibility. Doing well and receiving high grades in the A-G courses is also essential because UC eligibility is dependent on the combination of a student's A-G course grade point average and the student's SAT scores.

### **III. Methodology**

Schools, districts, principals, students, researchers, and practitioners understand the importance of A-G completion in achieving UC eligibility. However, relatively little is currently known about the nature of current course-taking patterns, particularly in the UC Partner schools serving economically disadvantaged and underrepresented students. In addition, although many recognize the importance of certain benchmark courses in a student's progress toward UC

eligibility, they lack understanding of the specifics of the timing for completing the college prep benchmark courses between 9th and 12th grades and how the benchmarks relate to getting and keeping students on track. The purpose of this report is to establish the baseline course-taking patterns for a group of urban UC Partner schools and to clarify the nature of the problems that need to be systematically addressed in increasing the representation of economically disadvantaged and underrepresented students on UC campuses.

### **Research Questions**

The general research questions addressed in this report are:

- How does A-G completion for students in the School/University Partnership schools compare to A-G completion for students in the other schools in their encompassing school district?
- What proportion of students in the UC Partner schools are on track and off track in completing the six key A-G requirements by particular grade levels, referred to as benchmark courses?
- What are the primary reasons for students being off track in completing the six key A-G course requirements?
- Do the on-track and off-track patterns differ by ethnicity or other background characteristics within the UC Partner schools?

### **Analytic and Empirical Strategy**

To understand how many students are on track, and where along the curriculum path from 9th through 12th grade students systematically fall off track, we mapped the basic steps a student has to take to become A-G eligible beginning in 9th grade. To be UC-eligible by the 12th grade, a student must complete the 15 units in the A-G required course sequence, 7 units of which must be taken in the last 2 years of high school. To successfully complete these requirements, there are courses a student must complete, and pass with a C, in the first 2 years of high school because many of the required A-G courses build on each other. For example, a student must complete and pass Algebra I before taking Geometry and must pass both of these mathematics courses before taking Algebra II.

In mapping the 15 A-G requirements, we identified four key courses that need to be completed by the first 2 years of high school and two that need to be accomplished by the 11th grade to allow a student the time and opportunity in the last 2 years of high school to complete and pass the additional 7 units of A-G

courses. These six key courses that need to be taken and passed with a C or better have been defined as “benchmark courses” by the University of California. They are Algebra I (or its equivalent) and college prep English 9 by the end of 9th grade; Geometry (or its equivalent) and college prep English 10 by the end of 10th grade; and Algebra II (or its equivalent) and Chemistry by the end of 11th grade. These six key benchmark courses, two at each grade level, thus mark whether a student is on track in a particular subject—mathematics (the “C” requirement), English (the “B” requirement), and the sciences (the “D” requirement)—as well as on track overall in the A-G sequence.

These six benchmark courses indicate whether a student is definitely on track, possibly on track, or definitely off track toward completing the A-G sequence given her current grade level and the traditional timing of high school courses. The benchmark courses are not an absolute in defining who will be eligible. There are different course choices that students can make for each of the subject requirements (i.e. taking Physics instead of Chemistry as the second year of Lab Science). There are also many paths that students can take to achieve A-G completion by the end of 12th grade. For example, students can double up on courses in later years, repeat and make up courses during the summer months, and lengthen the time that they spend in any given grade to increase the time that they have in high school to complete the courses that they need. Additional research is being conducted to understand the myriad other paths that students take to achieve A-G eligibility, the likelihood of these paths, and their probabilities of success in achieving A-G eligibility.

Despite the many choices that students have to achieve A-G eligibility by the end of 12th grade, it is important to understand the traditional path and to monitor these key courses because they help identify students who need guidance and support in their course taking during high school. Figure 1 depicts three potential curriculum paths for students by the end of 11th grade and indicates via the judgement of the benchmarks whether the student is definitely on track, potentially on track, or definitely off track. The first student, who is “definitely on track,” was able to complete the Algebra I and English benchmarks by the end of 9th grade; English 10 and Geometry by the end of 10th grade, and the Chemistry benchmark by the end of 11th grade. The student who is “potentially on track” completed the English 9 benchmark by the end of 9th grade and English 10 by the end of 10th grade. That student did not meet the Algebra I benchmark by the end of 9th grade,

but did meet it by the end of 10th grade. She then did progress into Geometry and therefore has the possibility to complete the required UC-approved math courses as long as she takes and completes the third UC-approved math course before the end of her senior year. In terms of science, this student also did not meet the chemistry benchmark by the end of 11th grade, but did complete Biology 1 by 11th grade. Therefore, if she took and completed a UC-approved science lab course before the end of her senior year, she could still meet the D requirement. Making these types of assessments at the end or beginning of each grade level assists schools in identifying the specific curriculum choices and needs of their students. It allows schools to provide the necessary support and guidance for students during high school and maintains a student’s range of choices for college/university.

**Definitely on Track**

9	10	11	12
Algebra IAB	Geometry AB	Algebra IIAB	
English 9AB	English 10 AB	English Lit/English Comp	
	Biology 1AB	Chemistry AB	
	Spanish 1AB	Spanish 2AB	

**Potentially on Track**

9	10	11	12
Pre-Algebra IAB	Algebra IAB	Geometry AB	
English 9AB	English 10AB	English Lit/English Comp	
		Biology 1AB	
		Spanish 1AB	

**Definitely off Track**

9	10	11	12
Math 9	Pre-Algebra IAB	Algebra IAB	
English 9A	English 9B	English 10AB	
	Biology 1AB	Biology 1AB	
	Spanish IAB	French IAB	

*Figure 1.* Potential curriculum paths for three students in meeting, or not meeting, the A-G requirements.

## **Two-Pronged Analytic Strategy Using Two Cohorts of Data**

To investigate A-G completion and the benchmarks in light of the research questions, we analyzed two cohorts of new 9th-grade students during their 7th-through 12th-grade years—one cohort of 9th graders in 1996/97 and one cohort in 1997/98. The district generously made available for these analyses student-level data for the 1996/97 and 1997/98 cohorts of 9th graders, with data covering student demographics (Free/Reduced Lunch status, ethnicity, gender, etc.), language information (bilingual, English only, currently LEP, previously LEP), and course-taking behavior and course grades from 7th, 8th, 9th, 10th, 11th, and 12th grades. This required student-level district data from 1994/95 until 1999/00. Analyzing two cohorts of data allowed us to investigate the stability of our findings and conclusions.

Using this individual student-level data on each student, cohort files were built and course-taking event histories by semester were constructed for each student. With the data constructed in this manner, we first calculated our outcome variables. We calculated whether students were A-G eligible or competitively A-G eligible. A-G eligibility is based on a student completing the 15 units in the required UC-approved A-G course requirements by the end of 12th grade, of which 7 units must be taken in the last 2 years of high school. There were several nuances concerning what constituted a “UC-approved course” for the different A-G requirements, particularly the D requirement. Clarifications and discussions with UCOP and district staff allowed us to program these specific nuances and differences as part of the code for calculating A-G eligibility. Competitive A-G eligibility is based on a student having a grade point average of 4.0 or above in her A-G courses taken in the 10th, 11th, and 12th grades. A “typical” student in the top two tiers of UCLA’s applicant pool earned a GPA of a 4.0 or above. These definitions are laid out in the UC admission criteria.

Next, we constructed separate variables indicating whether a student (a) completed both semesters of the course with a B or better; (b) completed both semesters of the course with a C or better (i.e., passed the course); (c) completed both semesters of a course with any grade A, B, C, D, or F in both semesters (i.e., completed the course); (d) was enrolled in/took both semesters of the year-long course but did not receive a grade (i.e., took, but did not complete); (e) did not take the course; or (f) left the set of UC Partner schools in the given district in a given year. A student was considered to have “met the benchmark” for a particular course



if he or she passed both semesters of the key course with a C or better by the end of the specified year. Moreover, these variables allowed for the calculation of two additional variables: (g) the number of students who completed both semesters with a D or F, and (h) the number of students who passed both semesters with a C.

With these variables, we analyzed two populations of students. First, we analyzed the original 9th-grade cohort, including a category for those students who left the set of Partner schools in their given district. We could identify that a student was no longer enrolled in the set of Partner schools. Therefore if a student transferred from one Partner school to another Partner school, we had data on the student's course-taking behavior and could analyze his completion of the benchmark courses. If a student left a Partner school and went to a non-Partner school in the same district, we also had that student's course-taking information, and we have provided that information. For the students who left the Partner schools during 9th grade, we had data on 83% of the students. Unfortunately, for the students who left the set of Partner schools during 10th or 11th grades, we do not have much information: 68% of those who left the set of Partner schools moved out of the district in 10th grade, and 89% in 11th grade. Thus, we do report the data that we had on the completion of the benchmarks for those students who left the set of Partner schools but remained in the district in a non-Partner school to provide the largest picture possible of completion patterns. Of course, students for whom we do not have data could easily have left the set of Partner schools to go to schools with more opportunities than the Partner schools, transferred to a different non-Partner school for myriad reasons, or dropped out. Overall, these analyses provide a picture of what percentage of students, overall, starting with a given set of schools, achieved A-G eligibility, as well as what percentage of students from the starting population of students (i.e., the cohort) were on track and off track along the way towards completion.

Second, we analyzed only those students who stayed at the set of UC Partner schools. This provides a picture of how well students were staying on track towards completion when they attended the Partner schools for their entire high school careers. These analyses are key since this is the true population of students that the schools are educating, guiding, and ultimately accountable for.

Because UC Partner schools are ultimately judged by their 12th-grade graduate population, and because schools have the largest influence on students who have attended their school for all 4 years, analyzing both of these populations is

important and provides key pieces of information for schools, districts and the state. More research and analysis are still needed to better understand the mobility of high school students and its impact on course-taking and reaching UC eligibility.

Given these two analysis strategies, we first constructed five mutually exclusive categories for all students in the 9th-grade cohort at each benchmark (a) who passed with an A or B; (b) who passed with a C; (c) who did not pass the course (received a D or F); (d) who did not take the course or failed to complete both semesters with any grade; and (e) who left the set of UC Partner schools. These calculations included all of the students in the cohort for every year, Grades 9 through 12, and illuminated what “choices” each of the students in the cohort “made” in the 8th, 9th, 10th, and 11th grades. We represented these data with a bar graph figure. The data show what happened to the entire cohort of students who started in the set of Partner schools as they moved through high school.

Operationally, the number and percentage of students in each 9th-grade cohort in the set of UC Partner schools that are defined as “having left” are those students who have not completed the requisite number of semesters by each grade level to be on track with UC requirements (i.e., 2 semesters for 9th grade, 4 semesters for 10th grade, and 6 semesters for 11th grade). This means that a student who has incomplete data (i.e., only 1 semester of course history data in the Partner schools by the end of 9th grade, or 3 or fewer semesters of course history data by the end of 10th grade) is counted as having “left the Partner schools.” For example, in the 9th-grade cohort for 1996/97 there were 14,390 students in the set of Partner schools. A total of 14,128 students completed 2 semesters of course work in a Partner school by the spring of 1996/97 (i.e., had 2 semesters of course-taking data at a Partner school for the 2 semesters of 9th grade), and 262 students had missing course-taking data for one or both of the semesters in 9th grade at a Partner school. The data could be incomplete because a student transferred to a non-Partner school (in the same district or another district), dropped out of school that semester, or for any other reason that might cause missing data for one of the semesters. All of these reasons are considered “having left the set of Partner schools.”

Next, we examined the completion and pass rates of students who remained in the Partner schools in the English and math benchmark courses. These calculations therefore do not include those students in the original cohort who left the set of UC Partner schools each year. As a result, the percentages have a changing (decreasing) denominator for each year/grade level. However, these calculations are important

because they reflect the students from the original cohort that the UC Partner schools were able to teach or guide in terms of classes and coursework in a given year. The graphs and percentages indicate how well the schools were able to educate the students who remained in the UC Partner schools in each year in English and math.

We have laid out this detailed information on the six benchmarks in a series of tables. We report on English, then math (Algebra I, Geometry, Algebra II), then Chemistry by grade. Tables 1.1 through 1.5 report on English 9; Tables 2.1 through 2.5 report on English 10; Tables 3.1 through 3.5 report on Algebra I; Tables 4.1 through 4.5 report on Geometry; Tables 5.1 through 5.5 report on Algebra II; and Tables 6.1 through 6.5 report on Chemistry.

The first table for each benchmark is labeled Table X.1 (i.e., 1.1 for English 9, 2.1 for English 10, 3.1 for Algebra I, etc.) and lays out the number of students who left the set of UC Partner schools for each year (i.e., the number and percentage of students in the 9th-grade cohort in the UC Partner schools that had and had not completed the requisite number of semesters by that grade level to be on track with UC requirements—2 semester for 9th grade, 4 semesters for 10th grade, and 6 semesters for 11th grade). Row 1 in Table X.1 indicates those who left and had incomplete data, and row 2 indicates those with complete data and who remained at the set of Partner schools. Tables X.2 through X.5 report the different variables for each benchmark concerning the completion and pass rates for those students who remained at the UC Partner schools by ethnicity, gender, limited English proficient status, and Free/Reduced Lunch status for all six benchmarks. Notice that row 2 in Table X.1 contains the same information (numbers and percentages) as the Total row in Tables X.2 through X.5; this is by design and highlights that Tables X.2 through X.5 contain information on only those who remained at the school. These tables include the data that are represented in the aforementioned graphs as well as some additional information for each of the benchmarks. In each of these tables, the number and percentage of students who met each of the benchmarks are shown in the Total row. Note that because LEP and Free/Reduced Lunch status change over time, we used the status of the students in the fall semester of the year for which we calculated the benchmark.

Table 1.1  
English 9 by Spring 1996-97 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Completion

		Taken 9th- grade English	Completed 9th-grade English	Passed with "C" or better 9th-grade English	Passed with "B" or better 9th-grade English
Those with incomplete data	% Passed	32%	31%	5%	2%
	# Passed	85	81	13	5
	Total <i>N</i>	262	262	262	262
Those who completed 2 semesters	% Passed	66%	66%	33%	17%
	# Passed	9,341	9,304	4,656	2,334
	Total <i>N</i>	14,128	14,128	14,128	14,128
Total	% Passed	66%	65%	32%	16%
	# Passed	9,426	9,385	4,669	2,339
	Total <i>N</i>	14,390	14,390	14,390	14,390

Table 1.2  
English 9 by Spring 1996-97 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Ethnicity

		Taken 9th- grade English	Completed 9th-grade English	Passed with "C" or better 9th-grade English	Passed with "B" or better 9th-grade English
American Indian	% Passed	91%	91%	50%	28%
	# Passed	29	29	16	9
	Total <i>N</i>	32	32	32	32
Asian	% Passed	86%	86%	70%	53%
	# Passed	87	87	71	54
	Total <i>N</i>	101	101	101	101
African American	% Passed	65%	64%	28%	12%
	# Passed	2,049	2,031	885	385
	Total <i>N</i>	3,166	3,166	3,166	3,166
Hispanic	% Passed	66%	66%	33%	17%
	# Passed	6,986	6,968	3,543	1,784
	Total <i>N</i>	10,585	10,585	10,585	10,585
White	% Passed	78%	77%	58%	41%
	# Passed	169	168	125	88
	Total <i>N</i>	217	217	217	217
Filipino	% Passed	74%	74%	63%	58%
	# Passed	14	14	12	11
	Total <i>N</i>	19	19	19	19
Pacific Islander	% Passed	88%	88%	50%	38%
	# Passed	7	7	4	3
	Total <i>N</i>	8	8	8	8
Total	% Passed	66%	66%	33%	17%
	# Passed	9,341	9,304	4,656	2,334
	Total <i>N</i>	14,128	14,128	14,128	14,128

Table 1.3  
English 9 by Spring 1996-97 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Gender

Gender		Taken 9th-grade English	Completed 9th-grade English	Passed with "C" or better 9th-grade English	Passed with "B" or better 9th-grade English
Female	% Passed	69%	68%	39%	21%
	# Passed	4,703	4,683	2,667	1,461
	Total N	6,851	6,851	6,851	6,851
Male	% Passed	64%	64%	27%	12%
	# Passed	4,638	4,621	1,989	873
	Total N	7,277	7,277	7,277	7,277
Total	% Passed	66%	66%	33%	17%
	# Passed	9,341	9,304	4,656	2,334
	Total N	14,128	14,128	14,128	14,128

Table 1.4  
English 9 by Spring 1996-97 for 9th-Grade 1996-97 Cohort Students in Partner Schools: LEP

LEP status		Taken 9th-grade English	Completed 9th-grade English	Passed with "C" or better 9th-grade English	Passed with "B" or better 9th-grade English
LEP	% Passed	52%	52%	22%	9%
	# Passed	2,954	2,946	1,227	523
	Total N	5,649	5,649	5,649	5,649
Non-LEP	% Passed	75%	75%	40%	21%
	# Passed	6,387	6,358	3,429	1,811
	Total N	8,479	8,479	8,479	8,479
Total	% Passed	66%	66%	33%	17%
	# Passed	9,341	9,304	4,656	2,334
	Total N	14,128	14,128	14,128	14,128

Table 1.5  
English 9 by Spring 1996-97 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Free Lunch

Free/reduced lunch status		Taken 9th-grade English	Completed 9th-grade English	Passed with "C" or better 9th-grade English	Passed with "B" or better 9th-grade English
Non-free/reduced lunch	% Passed	71%	71%	34%	17%
	# Passed	1,455	1,451	697	356
	Total N	2,054	2,054	2,054	2,054
Free/reduced lunch	% Passed	68%	68%	35%	17%
	# Passed	7,426	7,398	3,766	1,897
	Total N	10,888	10,888	10,888	10,888
Missing	% Passed	39%	38%	16%	7%
	# Passed	460	455	193	81
	Total N	1,186	1,186	1,186	1,186
Total	% Passed	66%	66%	33%	17%
	# Passed	9,341	9,304	4,656	2,334
	Total N	14,128	14,128	14,128	14,128

Table 2.1  
English 10 by Spring 1997-98 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Completion

		Taken 10th- grade English	Completed 10th-grade English	Passed with "C" or better 10th-grade English	Passed with "B" or better 10th-grade English
Those with incomplete data	% Passed	27%	27%	12%	6%
	# Passed	873	869	371	188
	Total <i>N</i>	3,187	3,187	3,187	3,187
Those who completed 4 semesters	% Passed	80%	80%	54%	32%
	# Passed	9,002	8,991	5,998	3,620
	Total <i>N</i>	11,203	11,203	11,203	11,203
Total	% Passed	69%	69%	44%	26%
	# Passed	9,875	9,860	6,369	3,808
	Total <i>N</i>	14,390	14,390	14,390	14,390

Table 2.2  
English 10 by Spring 1997-98 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Ethnicity

		Taken 10th- grade English	Completed 10th-grade English	Passed with "C" or better 10th-grade English	Passed with "B" or better 10th-grade English
American Indian	% Passed	89%	89%	59%	26%
	# Passed	24	24	16	7
	Total <i>N</i>	27	27	27	27
Asian	% Passed	92%	92%	86%	72%
	# Passed	79	79	74	62
	Total <i>N</i>	86	86	86	86
African American	% Passed	80%	80%	48%	26%
	# Passed	1,873	1,870	1,133	608
	Total <i>N</i>	2,347	2,347	2,347	2,347
Hispanic	% Passed	80%	80%	54%	33%
	# Passed	6,861	6,855	4,636	2,821
	Total <i>N</i>	8,555	8,555	8,555	8,555
White	% Passed	88%	88%	75%	66%
	# Passed	143	143	123	108
	Total <i>N</i>	163	163	163	163
Filipino	% Passed	84%	74%	63%	53%
	# Passed	16	14	12	10
	Total <i>N</i>	19	19	19	19
Pacific Islander	% Passed	100%	100%	67%	67%
	# Passed	6	6	4	4
	Total <i>N</i>	6	6	6	6
Total	% Passed	80%	80%	54%	32%
	# Passed	9,002	8,991	5,998	3,620
	Total <i>N</i>	11,203	11,203	11,203	11,203

Table 2.3  
English 10 by Spring 1997-98 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Gender

Gender		Taken 10th-grade English	Completed 10th-grade English	Passed with "C" or better 10th-grade English	Passed with "B" or better 10th-grade English
Female	% Passed	83%	83%	59%	39%
	# Passed	4,537	4,530	3,244	2,110
	Total N	5,469	5,469	5,469	5,469
Male	% Passed	78%	78%	48%	26%
	# Passed	4,465	4,461	2,754	1,510
	Total N	5,734	5,734	5,734	5,734
Total	% Passed	80%	80%	54%	32%
	# Passed	9,002	8,991	5,998	3,620
	Total N	11,203	11,203	11,203	11,203

Table 2.4  
English 10 by Spring 1997-98 for 9th-Grade 1996-97 Cohort Students in Partner Schools: LEP

LEP status		Taken 10th-grade English	Completed 10th-grade English	Passed with "C" or better 10th-grade English	Passed with "B" or better 10th-grade English
LEP	% Passed	70%	70%	43%	24%
	# Passed	3,129	3,125	1,929	1,066
	Total N	4,471	4,471	4,471	4,471
Non-LEP	% Passed	87%	87%	60%	38%
	# Passed	5,873	5,866	4,069	2,554
	Total N	6,732	6,732	6,732	6,732
Total	% Passed	80%	80%	54%	32%
	# Passed	9,002	8,991	5,998	3,620
	Total N	11,203	11,203	11,203	11,203

Table 2.5  
English 10 by Spring 1997-98 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Free Lunch

Free/reduced lunch status		Taken 10th-grade English	Completed 10th-grade English	Passed with "C" or better 10th-grade English	Passed with "B" or better 10th-grade English
Non-free/reduced lunch	% Passed	84%	84%	56%	36%
	# Passed	1,310	1,308	868	559
	Total N	1,558	1,558	1,558	1,558
Free/reduced lunch	% Passed	80%	80%	55%	33%
	# Passed	7,116	7,109	4,823	2,890
	Total N	8,842	8,842	8,842	8,842
Missing	% Passed	72%	71%	38%	21%
	# Passed	576	574	307	171
	Total N	803	803	803	803
Total	% Passed	80%	80%	54%	32%
	# Passed	9,002	8,991	5,998	3,620
	Total N	11,203	11,203	11,203	11,203

Table 3.1  
Algebra I/Integrated Math I by Spring 1996-97 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Completion

		Taken Algebra I/ Int Math I by 9th grade	Completed Algebra I/ Int Math I by 9th grade	Passed with "C" or better Algebra I/ Int Math I by 9th grade	Passed with "B" or better Algebra I/ Int Math I by 9th grade
Those with incomplete data	% Passed	16%	15%	6%	2%
	# Passed	41	40	15	6
	Total N	262	262	262	262
Those who completed 2 semesters	% Passed	44%	43%	21%	10%
	# Passed	6,166	6,137	2,928	1,385
	Total N	14,128	14,128	14,128	14,128
Total	% Passed	43%	43%	20%	10%
	# Passed	6,207	6,177	2,943	1,391
	Total N	14,390	14,390	14,390	14,390

Table 3.2  
Algebra I/Integrated Math I by Spring 1996-97 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Ethnicity

		Taken Algebra I/ Int Math I by 9th grade	Completed Algebra I/ Int Math I by 9th grade	Passed with "C" or better Algebra I/ Int Math I by 9th grade	Passed with "B" or better Algebra I/ Int Math I by 9th grade
American Indian	% Passed	41%	41%	22%	9%
	# Passed	13	13	7	3
	Total N	32	32	32	32
Asian	% Passed	73%	73%	58%	39%
	# Passed	74	74	59	39
	Total N	101	101	101	101
African American	% Passed	38%	38%	15%	6%
	# Passed	1,199	1,190	490	188
	Total N	3,166	3,166	3,166	3,166
Hispanic	% Passed	45%	45%	21%	10%
	# Passed	4,738	4,719	2,265	1,091
	Total N	10,585	10,585	10,585	10,585
White	% Passed	58%	58%	43%	26%
	# Passed	126	125	93	57
	Total N	217	217	217	217
Filipino	% Passed	58%	58%	53%	32%
	# Passed	11	11	10	6
	Total N	19	19	19	19
Pacific Islander	% Passed	63%	63%	50%	13%
	# Passed	5	5	4	1
	Total N	8	8	8	8
Total	% Passed	44%	43%	21%	10%
	# Passed	6,166	6,137	2,928	1,385
	Total N	14,128	14,128	14,128	14,128



Table 3.3

Algebra I/Integrated Math I by Spring 1996-97 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Gender

Gender		Taken Algebra I/ Int Math I by 9th grade	Completed Algebra I/ Int Math I by 9th grade	Passed with "C" or better Algebra I/ Int Math I by 9th grade	Passed with "B" or better Algebra I/ Int Math I by 9th grade
Female	% Passed	47%	47%	24%	11%
	# Passed	3,247	3,233	1,644	785
	Total N	6,851	6,851	6,851	6,851
Male	% Passed	40%	40%	18%	8%
	# Passed	2,919	2,904	1,284	600
	Total N	7,277	7,277	7,277	7,277
Total	% Passed	44%	43%	21%	10%
	# Passed	6,166	6,137	2,928	1,385
	Total N	14,128	14,128	14,128	14,128

Table 3.4

Algebra I/Integrated Math I by Spring 1996-97 for 9th-Grade 1996-97 Cohort Students in Partner Schools: LEP

LEP status		Taken Algebra I/ Int Math I by 9th grade	Completed Algebra I/ Int Math I by 9th grade	Passed with "C" or better Algebra I/ Int Math I by 9th grade	Passed with "B" or better Algebra I/ Int Math I by 9th grade
LEP	% Passed	37%	37%	14%	7%
	# Passed	2,091	2,081	816	371
	Total N	5,649	5,649	5,649	5,649
Non-LEP	% Passed	48%	48%	25%	12%
	# Passed	4,075	4,056	2,112	1,014
	Total N	8,479	8,479	8,479	8,479
Total	% Passed	44%	43%	21%	10%
	# Passed	6,166	6,137	2,928	1,385
	Total N	14,128	14,128	14,128	14,128

Table 3.5  
 Algebra I/Integrated Math I by Spring 1996-97 for 9th-Grade 1996-97 Cohort Students in Partner  
 Schools: Free Lunch

Free/reduced lunch status		Taken Algebra I/ Int Math I by 9th grade	Completed Algebra I/ Int Math I by 9th grade	Passed with "C" or better Algebra I/ Int Math I by 9th grade	Passed with "B" or better Algebra I/ Int Math I by 9th grade
Non-free/ reduced lunch	% Passed	43%	43%	21%	10%
	# Passed	877	876	436	201
	Total <i>N</i>	2,054	2,054	2,054	2,054
Free/reduced lunch	% Passed	45%	45%	22%	10%
	# Passed	4,932	4,912	2,367	1,127
	Total <i>N</i>	10,888	10,888	10,888	10,888
Missing	% Passed	30%	29%	11%	5%
	# Passed	357	349	125	57
	Total <i>N</i>	1,186	1,186	1,186	1,186
Total	% Passed	44%	43%	21%	10%
	# Passed	6,166	6,137	2,928	1,385
	Total <i>N</i>	14,128	14,128	14,128	14,128

Table 4.1  
 Geometry/Integrated Math II by Spring 1997-98 for 9th-Grade 1996-97 Cohort Students in Partner  
 Schools: Completion

		Taken Geometry/ Int Math II by 10th grade	Completed Geometry/ Int Math II by 10th grade	Passed with "C" or better Geometry/ Int Math II by 10th grade	Passed with "B" or better Geometry/ Int Math II by 10th grade
Those with incomplete data	% Passed	5%	5%	2%	1%
	# Passed	161	159	69	32
	Total N	3,187	3,187	3,187	3,187
Those who completed 4 semesters	% Passed	32%	32%	16%	7%
	# Passed	3,632	3,611	1,828	800
	Total N	11,203	11,203	11,203	11,203
Total	% Passed	26%	26%	13%	6%
	# Passed	3,793	3,770	1,897	832
	Total N	14,390	14,390	14,390	14,390

Table 4.2  
 Geometry/Integrated Math II by Spring 1997-98 for 9th-Grade 1996-97 Cohort Students in Partner  
 Schools: Ethnicity

		Taken Geometry/ Int Math II by 10th grade	Completed Geometry/ Int Math II by 10th grade	Passed with "C" or better Geometry/ Int Math II by 10th grade	Passed with "B" or better Geometry/ Int Math II by 10th grade
American Indian	% Passed	30%	30%	19%	7%
	# Passed	8	8	5	2
	Total N	27	27	27	27
Asian	% Passed	57%	57%	51%	27%
	# Passed	49	49	44	23
	Total N	86	86	86	86
African American	% Passed	30%	30%	14%	5%
	# Passed	707	696	338	120
	Total N	2,347	2,347	2,347	2,347
Hispanic	% Passed	32%	32%	16%	7%
	# Passed	2,759	2,749	1,356	607
	Total N	8,555	8,555	8,555	8,555
White	% Passed	58%	58%	46%	27%
	# Passed	94	94	75	44
	Total N	163	163	163	163
Filipino	% Passed	58%	58%	37%	16%
	# Passed	11	11	7	3
	Total N	19	19	19	19
Pacific Islander	% Passed	67%	67%	50%	17%
	# Passed	4	4	3	1
	Total N	6	6	6	6
Total	% Passed	32%	32%	16%	7%
	# Passed	3,632	3,611	1,828	800
	Total N	11,203	11,203	11,203	11,203

Table 4.3  
 Geometry/Integrated Math II by Spring 1997-98 for 9th-Grade 1996-97 Cohort Students in Partner  
 Schools: Gender

Gender		Taken Geometry/ Int Math II by 10th grade	Completed Geometry/ Int Math II by 10th grade	Passed with "C" or better Geometry/ Int Math II by 10th grade	Passed with "B" or better Geometry/ Int Math II by 10th grade
Female	% Passed	36%	36%	18%	8%
	# Passed	1,961	1,951	1,010	457
	Total N	5,469	5,469	5,469	5,469
Male	% Passed	29%	29%	14%	6%
	# Passed	1,671	1,660	818	343
	Total N	5,734	5,734	5,734	5,734
Total	% Passed	32%	32%	16%	7%
	# Passed	3,632	3,611	1,828	800
	Total N	11,203	11,203	11,203	11,203

Table 4.4  
 Geometry/Integrated Math II by Spring 1997-98 for 9th-Grade 1996-97 Cohort Students in Partner  
 Schools: LEP

LEP status		Taken Geometry/ Int Math II by 10th grade	Completed Geometry/ Int Math II by 10th grade	Passed with "C" or better Geometry/ Int Math II by 10th grade	Passed with "B" or better Geometry/ Int Math II by 10th grade
LEP	% Passed	23%	23%	10%	4%
	# Passed	1,039	1,033	431	183
	Total N	4,471	4,471	4,471	4,471
Non-LEP	% Passed	39%	38%	21%	9%
	# Passed	2,593	2,578	1,397	617
	Total N	6,732	6,732	6,732	6,732
Total	% Passed	32%	32%	16%	7%
	# Passed	3,632	3,611	1,828	800
	Total N	11,203	11,203	11,203	11,203

Table 4.5  
 Geometry/Integrated Math II by Spring 1997-98 for 9th-Grade 1996-97 Cohort Students in Partner  
 Schools: Free Lunch

Free/reduced lunch status		Taken Geometry/ Int Math II by 10th grade	Completed Geometry/ Int Math II by 10th grade	Passed with "C" or better Geometry/ Int Math II by 10th grade	Passed with "B" or better Geometry/ Int Math II by 10th grade
Non-free/ reduced lunch	% Passed	33%	33%	18%	8%
	# Passed	512	508	287	122
	Total <i>N</i>	1,558	1,558	1,558	1,558
Free/reduced lunch	% Passed	33%	33%	16%	7%
	# Passed	2,929	2,912	1,449	642
	Total <i>N</i>	8,842	8,842	8,842	8,842
Missing	% Passed	24%	24%	11%	4%
	# Passed	191	191	92	36
	Total <i>N</i>	803	803	803	803
Total	% Passed	32%	32%	16%	7%
	# Passed	3,632	3,611	1,828	800
	Total <i>N</i>	11,203	11,203	11,203	11,203

Table 5.1  
Algebra II/Integrated Math III by Spring 1998-99 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Completion

		Taken Algebra II/ Int Math III by 11th grade	Completed Algebra II/ Int Math III by 11th grade	Passed with "C" or better Algebra II/ Int Math III by 11th grade	Passed with "B" or better Algebra II/ Int Math III by 11th grade
Those with incomplete data	% Passed	3%	3%	1%	1%
	# Passed	184	182	99	43
	Total N	6,784	6,784	6,784	6,784
Those who completed 6 semesters	% Passed	32%	32%	19%	9%
	# Passed	2,454	2,449	1,411	675
	Total N	7,606	7,606	7,606	7,606
Total	% Passed	18%	18%	10%	5%
	# Passed	2,638	2,631	1,510	718
	Total N	14,390	14,390	14,390	14,390

Table 5.2  
Algebra II/Integrated Math III by Spring 1998-99 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Ethnicity

		Taken Algebra II/ Int Math III by 11th grade	Completed Algebra II/ Int Math III by 11th grade	Passed with "C" or better Algebra II/ Int Math III by 11th grade	Passed with "B" or better Algebra II/ Int Math III by 11th grade
American Indian	% Passed	33%	33%	17%	6%
	# Passed	6	6	3	1
	Total N	18	18	18	18
Asian	% Passed	70%	70%	64%	43%
	# Passed	49	49	45	30
	Total N	70	70	70	70
African American	% Passed	33%	33%	19%	7%
	# Passed	485	483	279	108
	Total N	1,454	1,454	1,454	1,454
Hispanic	% Passed	31%	31%	17%	8%
	# Passed	1,818	1,815	1,010	491
	Total N	5,918	5,918	5,918	5,918
White	% Passed	66%	66%	51%	30%
	# Passed	84	84	65	39
	Total N	128	128	128	128
Filipino	% Passed	57%	57%	43%	29%
	# Passed	8	8	6	4
	Total N	14	14	14	14
Pacific Islander	% Passed	100%	100%	75%	50%
	# Passed	4	4	3	2
	Total N	4	4	4	4
Total	% Passed	32%	32%	19%	9%
	# Passed	2,454	2,449	1,411	675
	Total N	7,606	7,606	7,606	7,606

Table 5.3  
Algebra II/Integrated Math III by Spring 1998-99 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Gender

Gender		Taken Algebra II/ Int Math III by 11th grade	Completed Algebra II/ Int Math III by 11th grade	Passed with "C" or better Algebra II/ Int Math III by 11th grade	Passed with "B" or better Algebra II/ Int Math III by 11th grade
Female	% Passed	36%	36%	21%	10%
	# Passed	1,361	1,358	801	385
	Total N	3,787	3,787	3,787	3,787
Male	% Passed	29%	29%	16%	8%
	# Passed	1,093	1,091	610	290
	Total N	3,819	3,819	3,819	3,819
Total	% Passed	32%	32%	19%	9%
	# Passed	2,454	2,449	1,411	675
	Total N	7,606	7,606	7,606	7,606

Table 5.4  
Algebra II/Integrated Math III by Spring 1998-99 for 9th-Grade 1996-97 Cohort Students in Partner Schools: LEP

LEP status		Taken Algebra II/ Int Math III by 11th grade	Completed Algebra II/ Int Math III by 11th grade	Passed with "C" or better Algebra II/ Int Math III by 11th grade	Passed with "B" or better Algebra II/ Int Math III by 11th grade
LEP	% Passed	21%	21%	10%	5%
	# Passed	632	630	307	138
	Total N	2,945	2,945	2,945	2,945
Non-LEP	% Passed	39%	39%	24%	12%
	# Passed	1,822	1,819	1,104	537
	Total N	4,661	4,661	4,661	4,661
Total	% Passed	32%	32%	19%	9%
	# Passed	2,454	2,449	1,411	675
	Total N	7,606	7,606	7,606	7,606

Table 5.5  
 Algebra II/Integrated Math III by Spring 1998-99 for 9th-Grade 1996-97 Cohort Students in Partner  
 Schools: Free Lunch

Free/reduced lunch status		Taken Algebra II/ Int Math III by 11th grade	Completed Algebra II/ Int Math III by 11th grade	Passed with "C" or better Algebra II/ Int Math III by 11th grade	Passed with "B" or better Algebra II/ Int Math III by 11th grade
Non-free/ reduced lunch	% Passed	38%	38%	25%	12%
	# Passed	381	380	252	118
	Total <i>N</i>	1,013	1,013	1,013	1,013
Free/reduced lunch	% Passed	32%	32%	18%	8%
	# Passed	1,945	1,942	1,085	520
	Total <i>N</i>	6,145	6,145	6,145	6,145
Missing	% Passed	29%	28%	17%	8%
	# Passed	128	127	74	37
	Total <i>N</i>	448	448	448	448
Total	% Passed	32%	32%	19%	9%
	# Passed	2,454	2,449	1,411	675
	Total <i>N</i>	7,606	7,606	7,606	7,606



Table 6.1  
Chemistry by Spring 1998-99 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Completion

		Taken Chemistry by 11th grade	Completed Chemistry by 11th grade	Passed with "C" or better Chemistry by 11th grade	Passed with "B" or better Chemistry by 11th grade
Those with incomplete data	% Passed	3%	3%	1%	1%
	# Passed	176	173	95	41
	Total N	6,784	6,784	6,784	6,784
Those who completed 6 semesters	% Passed	36%	36%	21%	10%
	# Passed	2,771	2,761	1,605	774
	Total N	7,606	7,606	7,606	7,606
Total	% Passed	20%	20%	12%	6%
	# Passed	2,947	2,934	1,700	815
	Total N	14,390	14,390	14,390	14,390

Table 6.2  
Chemistry by Spring 1998-99 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Ethnicity

		Taken Chemistry by 11th grade	Completed Chemistry by 11th grade	Passed with "C" or better Chemistry by 11th grade	Passed with "B" or better Chemistry by 11th grade
American Indian	% Passed	31%	31%	25%	0%
	# Passed	5	5	4	0
	Total N	16	16	16	16
Asian	% Passed	69%	69%	55%	30%
	# Passed	49	49	39	21
	Total N	71	71	71	71
African American	% Passed	40%	40%	25%	12%
	# Passed	580	576	356	170
	Total N	1,452	1,452	1,452	1,452
Hispanic	% Passed	35%	35%	19%	9%
	# Passed	2,061	2,055	1,142	544
	Total N	5,922	5,922	5,922	5,922
White	% Passed	51%	51%	44%	29%
	# Passed	65	65	56	37
	Total N	127	127	127	127
Filipino	% Passed	50%	50%	36%	14%
	# Passed	7	7	5	2
	Total N	14	14	14	14
Pacific Islander	% Passed	100%	100%	75%	0%
	# Passed	4	4	3	0
	Total N	4	4	4	4
Total	% Passed	36%	36%	21%	10%
	# Passed	2,771	2,761	1,605	774
	Total N	7,606	7,606	7,606	7,606

Table 6.3

Chemistry by Spring 1998-99 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Gender

Gender		Taken Chemistry by 11th grade	Completed Chemistry by 11th grade	Passed with "C" or better Chemistry by 11th grade	Passed with "B" or better Chemistry by 11th grade
Female	% Passed	40%	40%	24%	12%
	# Passed	1,509	1,502	916	459
	Total N	3,787	3,787	3,787	3,787
Male	% Passed	33%	33%	18%	8%
	# Passed	1,262	1,259	689	315
	Total N	3,819	3,819	3,819	3,819
Total	% Passed	36%	36%	21%	10%
	# Passed	2,771	2,761	1,605	774
	Total N	7,606	7,606	7,606	7,606

Table 6.4

Chemistry by Spring 1998-99 for 9th-Grade 1996-97 Cohort Students in Partner Schools: LEP

LEP status		Taken Chemistry by 11th grade	Completed Chemistry by 11th grade	Passed with "C" or better Chemistry by 11th grade	Passed with "B" or better Chemistry by 11th grade
LEP	% Passed	27%	27%	13%	6%
	# Passed	803	798	391	174
	Total N	2,945	2,945	2,945	2,945
Non-LEP	% Passed	42%	42%	26%	13%
	# Passed	1,968	1,963	1,214	600
	Total N	4,661	4,661	4,661	4,661
Total	% Passed	36%	36%	21%	10%
	# Passed	2,771	2,761	1,605	774
	Total N	7,606	7,606	7,606	7,606

Table 6.5

Chemistry by Spring 1998-99 for 9th-Grade 1996-97 Cohort Students in Partner Schools: Free Lunch

Free/reduced lunch status		Taken Chemistry by 11th grade	Completed Chemistry by 11th grade	Passed with "C" or better Chemistry by 11th grade	Passed with "B" or better Chemistry by 11th grade
Non-free/ reduced lunch	% Passed	35%	35%	24%	12%
	# Passed	356	356	242	121
	Total N	1,013	1,013	1,013	1,013
Free/s	% Passed	37%	37%	21%	10%
	# Passed	2,268	2,258	1,309	627
	Total N	6,145	6,145	6,145	6,145
Missing	% Passed	33%	33%	12%	6%
	# Passed	147	147	54	26
	Total N	448	448	448	448
Total	% Passed	36%	36%	21%	10%
	# Passed	2,771	2,761	1,605	774
	Total N	7,606	7,606	7,606	7,606

Next, we tracked which students completed both English and mathematics benchmark courses by the end of 9th grade and by the end of 10th grade. This showed that, although students may meet a benchmark in one subject in a specified year, they may not meet all the benchmarks in all the subjects in a given year.

Overall, we analyzed these six key benchmark courses both statically and longitudinally to illuminate the key transitions and stumbling blocks, such as enrollment in Algebra I in 9th grade, that keep students from obtaining UC eligibility by the end of 12th grade. The benchmarks analyzed individually are static estimations of whether a student is on track in a particular subject at a certain grade level. Analyzed collectively, they are longitudinal estimations of whether a student is on track or off track in all the required subjects by a certain grade level in that student's efforts to achieve UC eligibility by the end of 12th grade. In the end, these benchmark data demonstrate course-taking patterns over time and assist us in understanding which students are systematically staying on track or falling off track in moving toward A-G completion.

#### **IV. How Does A-G Completion in the University Partnership Schools Compare to That in Their Encompassing District?**

Increasing UC eligibility is a key goal of the UC Partnerships. Understanding how well a set of urban UC Partner schools are doing in achieving this goal is important. However, it is also important to understand how the UC Partner schools compare to the other schools in their district. UC Partner schools are selected as Partners by the campuses for many reasons. Most schools are selected because of their large percentages of underrepresented minorities, as well as their low overall school performance on the statewide achievement tests. Therefore, we expect the UC Partner schools to have lower A-G completion rates than the other schools in their encompassing district because the Partner schools are especially selected from the neediest schools. The importance of the analysis here is to establish the overall pattern and to arm the schools and Partnerships with real data and numbers to tackle the issues at hand.

We found that, overall, in the UC Partner schools, 5.0% of the 9th-grade cohort achieved A-G eligibility by the end of 12th grade (Table 7). Overall, in the UC Partner schools' encompassing school district, 7.2% of the 9th-grade cohort from 1996/97 were A-G eligible by the end of 12th grade. Looking at these data by ethnicity, we found that in the UC Partner schools 34.7% of the Asian students,

Table 7

A-G Eligibility for 1996/97 9th-Grade Cohort in the Partner Schools and Their Encompassing School District by the End of 12th Grade

		Partner schools			School district		
		Not eligible	A-G eligible	Ethnic distribution	Not eligible	A-G eligible	Ethnic distribution
1996/97 9th-grade cohort							
American Indian	<i>N</i>	29	3	32	154	11	172
	%	90.6	9.4	0.2	93.3	6.7	0.3
Asian	<i>N</i>	66	35	101	1,763	705	2,523
	%	65.3	34.7	0.7	71.4	28.6	5.1
African American	<i>N</i>	3,171	113	3,284	6,764	259	7,291
	%	96.6	3.4	22.8	96.3	3.7	14.5
Hispanic	<i>N</i>	10,197	530	10,727	30,901	1,421	3,3,239
	%	95.1	4.9	74.5	95.6	4.4	66.5
White	<i>N</i>	177	42	219	4,530	928	5,587
	%	80.8	19.2	1.5	83.0	17.0	11.2
Filipino	<i>N</i>	17	2	19	804	161	984
	%	89.5	10.5	0.1	83.3	16.7	2.0
Pacific-Islander	<i>N</i>	7	1	8	172	16	195
	%	87.5	12.5	0.1	91.5	8.5	0.4
Total	<i>N</i>	13,664	726	14,390	45,088	3,501	48,589
	%	94.9	5.0	100	92.8	7.2	100

19.2% of the White students, 4.9% of the Hispanic students, and 3.4% of the African American students in the 9th-grade cohort of students from 1996/97 were A-G eligible by the end of 12th grade in 1999/00. In the encompassing school district, a total of 28.6% of Asian students, 17% of White students, 4.4% of Hispanic students, and 3.7% of African American students in the 9th-grade cohort of students were A-G eligible by the end of 12th grade. Because we know statewide that the UC eligibility rates and A-G eligibility rates are lower for African American and Hispanic students, we would expect the overall A-G eligibility rates for the UC Partner schools to be lower than those of their district based on the ethnic distributions alone. However, we found that the A-G eligibility rates for each ethnic group, except African American students, were higher in the UC Partner schools than in their district. Notice that, overall, Hispanic students, the largest ethnic group in the Partner schools, have a low eligibility rate compared with the other ethnic groups, therefore resulting in a lower overall eligibility rate for the set of UC Partner schools as a whole compared with the encompassing district.

Additionally, we assessed what percentage of students in the 9th-grade cohort in the UC Partner schools and in their encompassing district were considered “competitively A-G eligible.” Competitive eligibility is based on a grade point average being 4.0 or above. The GPA used for eligibility and admissions is based on a student’s A-G course grades in Grades 10-12 and weighted for honors and Advanced Placement courses, and is known as the “A-G 10-12 weighted GPA.” A “typical” student in the top two tiers of UCLA’s applicant pool earned a GPA of a 4.0 or above. These definitions are laid out in the UC admission criteria. We found that, overall, in the UC Partner schools, 0.6% of the 9th-grade cohort achieved competitive A-G eligibility by the end of 12th grade (82 out of 14,390 students). In the UC Partner schools’ encompassing school district, 1.1% of the 9th-grade cohort from 1996/97 were competitively A-G eligible by the end of 12th grade (531 out of 48,589 students). This is 20.4% of all of the A-G eligible students in the UC Partner schools and 25.6% of all of the A-G eligible students in the encompassing district. Moreover, the average A-G 10-12 weighted GPA for the competitively eligible students in the UC Partner schools was 4.17, and for the competitively eligible students in the encompassing district, the average GPA was similar at 4.22. This indicates that the competitively eligible students in the UC Partner schools are of the same caliber as those in their encompassing district (this is true by definition given the same number of students).

To more fully understand these patterns of A-G eligibility rates and how they interrelate to UC eligibility, we also examined the attrition of students from the 1996/97 9th-grade cohort, and what type of students entered the UC Partner schools in the 10th, 11th, and 12th grades and finished 12th grade with the 1996/97 cohort in 1999/00. This is an important comparison because the S/UP Partner schools are judged by the performance of their high school graduating class, not necessarily by the students that they serve. This examination illuminates what type of students stay in the UC Partner schools and what type of students enter via transfers, which together make up the final graduating classes on which a school is judged for UC eligibility and A-G eligibility rates.

We also investigated how many of the students in the 12th-grade class of 1999/00 were students in the 9th-grade 1996/97 cohort, meaning that they did not leave the UC Partner schools during high school. As a base, the 1996/97 9th-grade cohort had 14,390 students. By the end of 9th grade, 262 students had left the set of UC Partner schools. By 10th grade, 3,187 students had left the set of Partner schools.

And by 12th grade, 7,039 students had left the set of Partner schools, leaving only 51.1% (7,351/14,390) of the original cohort of 9th-grade students. This includes 1,972 students who were still in the Partner schools, but who were retained or did not reach the 12th-grade level within 4 years. These data indicate a very high mobility rate, although one typical for low-performing urban high schools. In addition, by 12th grade, 1,733 students had entered the UC Partner schools. This means, overall, that the 12th-grade class of 1999/00 consisted of 75.6% students who originally started at the schools in the 9th grade and never left and 24.4% students who entered the schools during their high school years.

We found that the students who entered the UC Partner schools over the course of high school differed from those students who had spent their entire high school careers in the UC Partner schools. Of the students who entered vs. the students who remained, a larger percentage of those students who entered were African American and White, male, limited English proficient, and not eligible for the Free/Reduced Lunch program. The students who entered the UC Partner schools also had lower average reading, math, and language arts percentile scores on the SAT9 in 11th grade than those students who remained at the UC Partner schools for their high school careers (i.e., who were in the original cohort). A large percentage of the students who entered the Partner schools also scored below the 25th percentile in reading, mathematics, and language arts. (See Tables A.1 and A.2 in Appendix A for a comparison of the demographic and test score information on those students who began in the 9th-grade 1996/97 cohort and remained in the UC Partner schools through 12th grade and those students who entered the UC Partner schools at some point and finished 12th grade in 1999/00 in the UC Partner schools.)

At the end of these analyses, we found that the UC Partner schools had high (62.5%) attrition rates from 9th through 12th grade; however, the vast majority of 12th-grade students (75.6%) started high school at the UC Partner schools. Moreover, the students who entered the UC Partner schools over the course of high school were lower performing students, who were more likely to be limited English proficient, not eligible for the Free/Reduced Lunch program, male, and African American or White. Based on these changes in the school population over time and the attrition patterns, our calculation of A-G eligibility for the 9th-grade cohort is a slight overestimation of the A-G eligibility rate calculated for all the high school graduates in the Partner schools in 1999/00.

Additionally, we investigated what type of students became A-G eligible in the UC Partner schools. As we stated earlier, 5.0% of the 9th-grade cohort of students were A-G eligible at the UC Partner schools by the end of 12th grade. They were 726 in number, and they were primarily Hispanic students—4.8% Asian, 15.6% African American, 73.0% Hispanic, 5.8% White, 0.1% Pacific Islander, 0.4% American Indian, and 0.3% Filipino. They were majority female—62.8%. Most of them were eligible for Free/Reduced Lunch in 9th grade—78.2%. Finally, a substantial number were also limited English proficient in 9th grade—18.6%.

Also in an attempt to cross-validate our analyses, we compared the number of students who applied to the UC and the number of students who were A-G eligible the year before as seniors. We made this comparison for the district and for the set of Partner schools from secondary data sources that we obtained from the district and UCOP. We found the numbers in both cases to be similar. Specifically, we obtained the number of UC applicants for the 1999/00 school year for the individual S/UP schools and their encompassing district. Note that the students in the 1996/97 cohort would have applied to the UC in 00/01. However, the 00/01 data on applicants to the UC were not available at the time this report was prepared. Therefore, we compared the number of A-G eligible students who were seniors in 1999/00 to the number of applicants in that same year, assuming that the number of applicants had relatively little fluctuation over the years. In the end, for the district, we found 3,501 students who were A-G eligible (the 7.2% reported earlier) in 1999/00. UCOP reported 3,999 applicants from this encompassing district in 1999/00. Moreover, we identified 726 students in the S/UP schools who were A-G eligible (the 5.0% reported earlier) in 1999/00. UCOP reported 754 applicants from the set of Partner schools in 1999/00. These comparisons validate our computations and calculations.

To understand more fully how so few students in the UC Partner schools are UC eligible by the end of 12th grade, we need to understand how students maneuver through the A-G courses and where it is that students systematically fall off track. Moreover, we need to know if certain types of students fall off track at different points during their high school years. The next sections look into these issues.

## V. Who Is On Track and Off Track and Why in Completing the Required College Prep Course Sequence?

Analyses of whether and how successfully students passed the six key college prep courses in math, English, and science by the end of certain grade levels indicates how many students are on track and where the majority of students are systematically falling off track for each individual benchmark course. These six key college prep courses must be the UC-approved courses to be counted for A-G eligibility and UC eligibility.

### Analyzing the Original 1996/97 9th-Grade Cohort

First, we examined the benchmark courses *individually* for the 9th-grade cohort of 1996/97 across subject matters according to which benchmark courses need to be met by the end of each grade level. We examined whether students in the 9th-grade cohort either left the set of Partner schools, did not take or failed to complete a key benchmark course, finished the course with a D or an F (i.e., completed the course but did not pass it), passed the course with a C, or passed it with a B or better. Figure 2 illustrates graphically the percentages of students in each of these categories for each of the six benchmark courses.

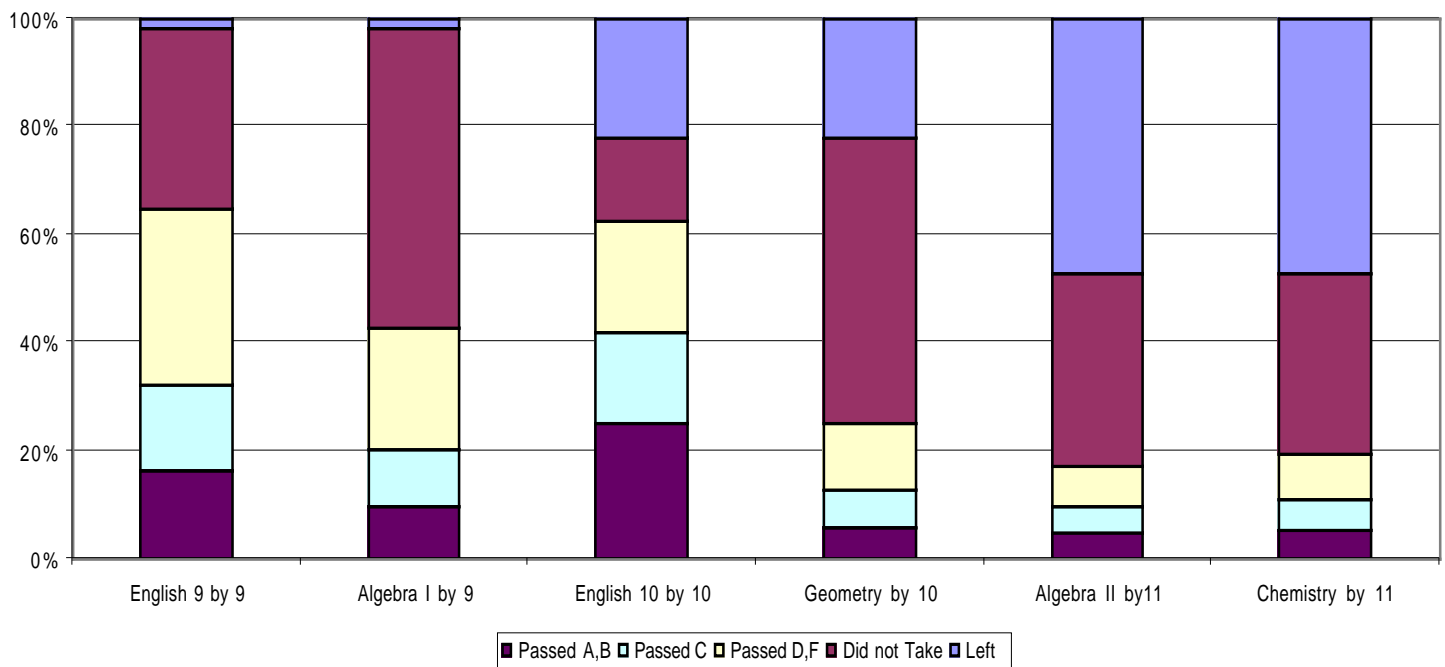


Figure 2. UC Partnership schools: Proportion of students from the 1996/97 cohort who left, did not take, or passed 6 benchmark courses.



For the 9th grade, we found that 32.3% of the 9th-grade cohort students were on track in the UC-approved English requirement by the end of 9th grade—16.1% passed the English 9 requirement with a C, and 16.2% passed with an A or B. Students were systematically falling off track in completing the English 9 benchmark because either they were not taking the course or they were failing the course (i.e., completing the course with a D or F). Of the 14,390 students in the 9th-grade cohort, 33.5% did not take the UC-approved English 9 course, and 32.3% completed the English 9 course with a D or an F by the end of 9th grade. For the Algebra I benchmark, 20.3% of the 9th-grade cohort was on track by the end of 9th grade—10.7% passed with a C, and 9.6% passed with an A or B. Students were primarily off track in Algebra I because they were not taking the course (55.5%). Remember that these calculations assess whether a student completed a course by the end of a certain grade level. If a student, for example, completed Algebra I in the 8th grade, then she was included among those that completed Algebra I by the end of 9th grade (refer to Figure 2).

In addition, out of the 262 9th-grade cohort students that left the set of UC Partner schools during the 9th grade (1.8% of the 9th-grade cohort; see Table 1.1), 83.2% (218 students) remained in their encompassing district, and 16.8% did not have data and could not be tracked. Of those students who left the set of Partner schools, the majority did not take Algebra I (69.1%) or English 9 (52.3%) by the end of 9th grade. Only 37 students (14.1%) completed Algebra I by the end of 9th grade, and 23 of those students passed with a D or F; 81 students (31.0%) completed English 9 by the end of 9th grade, and 68 of those students passed with a D or F.

By the 10th grade, 22.1% of the 9th-grade cohort had left the set of UC Partner schools. Students were systematically off track in completing the English 10 benchmark because they had left the set of Partner schools (22.1%) or were failing with a D or F (20.8%). However, 41.7% of the 9th-grade cohort was on track with the English 10 benchmark—16.5% passed with a C, and 25.2% passed with an A or B. For the Geometry benchmark, 12.7% of the students were on track—7.1% passed with a C, and 5.6% passed with an A or B. Students were primarily off track in the Geometry benchmark because they were not taking the course (52.8%) (see Figure 2).

Interestingly, out of the 3,187 9th-grade cohort students that left the set of UC Partner schools during the 10th grade (22.1% of the 9th-grade cohort; see Table 2.1), 31.6% (1,007 students) remained in their encompassing district, and 68.4% did not have data and could not be tracked. Of those students who left the set of Partner

schools, many did not take Geometry (28.1%) or take English 10 (11.7%) by the end of 10th grade. Only 113 students (3.5%) completed Geometry by the end of 10th grade: 74 students (2.3%) passed with a D or F; 20 students (0.6%) passed with a C; and 19 students (0.6%) passed with an A or B. However, 635 students (19.9%) completed English 10 by the end of 10th grade: 318 students (10.0%) passed with a D or F; 147 students (4.6%) passed with a C; and 170 students (5.3%) passed with an A or B.

Again, by 11th grade, a large percentage (47.1%) of the 9th-grade cohort had left the set of Partner schools. Leaving the set of Partner schools (47.1%) and not taking the Algebra II course (35.8%) or not taking Chemistry (33.7%) were the two main reasons that the cohort students were off track. At the end of 11th grade, 9.8% of the 9th-grade cohort students were on track for Algebra II, and 11.2% were on track for Chemistry.

Interestingly, out of the 6,784 9th-grade cohort students that left the set of UC Partner schools during the 11th grade (47.1% of the 9th-grade cohort; see Table 5.1), only 10.7% (725 students) remained in their encompassing district, and 89.3% did not have data and could not be tracked. Of those students who left the set of Partner schools, 9.3% did not take Algebra II and 8.8% did not take Chemistry by the end of 11th grade. Only 97 students (1.5%) completed Algebra II by the end of 11th grade: 46 students (0.7%) passed with a D or F; 31 students passed with a C (0.5%); and 20 students (0.3%) passed with an A or B. For Chemistry, 130 students (1.9%) completed the course by the end of 11th grade: 60 students (0.9%) passed with a D or F; 37 students (0.5%) passed with a C; and 33 students (0.5%) passed with an A or B.

Next, we examined the benchmark courses collectively for the 9th-grade cohort of 1996/97 across subject matters according to which benchmark courses need to be met by the end of each grade level. By the end of 9th grade, for example, to be on track for UC eligibility, a student needs to have passed Algebra I and English 9 with a C or better in each of the semesters. A total of 2,078 students, 14.4% of the 9th-grade cohort of 1996/97, were on track at the end of 9th grade. In addition, 17.9% were on track with English 9, but did not meet the Algebra I benchmark by the end of 9th grade, and 5.9% were on track in Algebra I, but did not meet the English 9 benchmark by the end of 9th grade. Overall, 59.9% of the 9th-grade cohort of 1996/97 did not meet either benchmark in English 9 or Algebra I by the end of 9th grade.

By the end of 10th grade, 1,045 students, 7.3% of the 9th-grade cohort, were on track. In addition, 33.2% were on track with English 9 and 10 but did not meet the math benchmarks of Algebra I and Geometry by the end of 10th grade. Also, 2.0% were on track in Algebra I and Geometry by the end of 10th grade but did not meet the English benchmarks of English 9 and English 10. Overall, 35.4% of the 9th-grade cohort that were still at the UC Partner schools in the 10th grade did not meet the cumulative 10th-grade benchmarks in mathematics and English. In addition, 22.1% of the 9th-grade cohort had left the set of UC Partner schools.

As noted in the previous section, by the end of the 12th grade, 5.0% of the 9th-grade cohort in the UC Partner schools were A-G eligible, whereas 7.2% of the 9th-grade cohort in the encompassing school district were A-G eligible by the end of 12th grade.

**Summary.** Overall, these data indicate two main reasons why students are systematically falling off track in meeting all the individual benchmark courses at certain grade levels. First, substantial numbers of students are leaving the set of UC Partner schools. We found that by 11th grade, nearly half of the students who started in 9th grade had left the set of UC Partner schools (either they left the UC Partner schools and dropped out, or left the UC Partner schools and transferred to another school). The majority of students who left the set of Partner schools during 10th and 11th grades were also not staying in the encompassing district. Of the students that left the set of Partner schools and did stay in the encompassing district, the majority did not take the benchmark courses, and very few passed with a C or higher. Secondly, students were not taking the benchmark courses during their early years of high school, which eliminates the time required to complete all 15 units of A-G courses. We found that students were not attempting the benchmark courses at the grade levels they needed to, in order to stay on track for A-G eligibility. Students may not be taking the courses for many reasons. The UC Partner schools may not have enough courses in which to enroll the students. Counselors may be advising the students to take other courses instead of the A-G required benchmark courses. Students themselves may be opting to not take the A-G required benchmark courses. Students may not be prepared to take the courses; that is, they may not have taken the prerequisite courses or may not have learned the concepts that they need. Many of these reasons for students not taking the A-G courses during the first 2 years of high school are within the control of the high schools in terms of better guidance for

students, additional academic support, and better preparation, as well as various policies related to curriculum and course-taking.

### Analyzing Students From the 1996/97 Cohort Who Stayed at UC Partner Schools

**Overall completion and passing rates.** Next, we looked more in depth at only the students who stayed in the UC Partner schools. We found that the students who stayed had higher completion rates (i.e., completing the course with any grade, A-F) and higher passing rates (i.e., completing the course with a C or better) in Algebra I than in Geometry and Algebra II. In the mathematics series (see Figure 3), 43% of the 9th-grade cohort students who stayed in the UC Partner schools in the given year completed Algebra I by the end of 9th grade, whereas roughly one third had completed Geometry by the end of 10th grade, or Algebra II by the end of 11th grade. Roughly 16-21% of the students who stayed in the Partner schools passed with a C or better, and about 7-10% passed with a B or better. See Figures 3 and 4 for the completion and passing rates for math and English courses for the 9th-grade cohort students who remained in the UC Partner schools.

In the English courses (see Figure 4), on the other hand, the pattern from 9th to 10th grade improves in all three areas: completed, passing with a C or better, and passing with a B or better. We found that about two thirds of the 9th-grade cohort

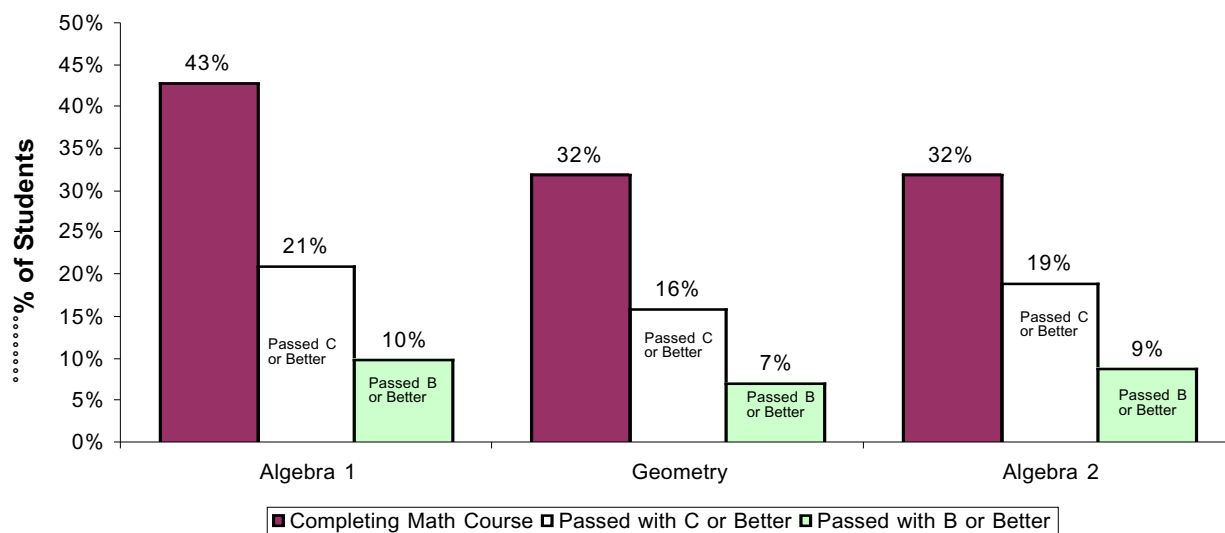


Figure 3. UC Partnership schools: Proportion of students from the 1996/97 cohort completing and passing math courses, Grades 9-11.

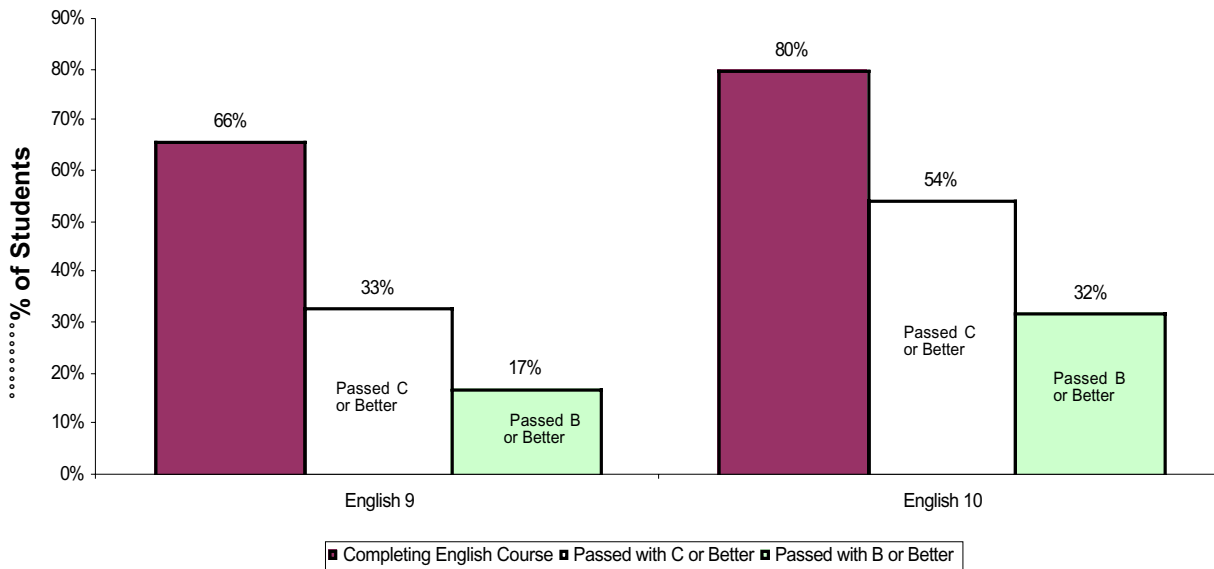


Figure 4. UC Partnership schools: Proportion of students from the 1996/97 cohort completing and passing English courses, Grades 9 and 10.

students who stayed in the UC Partner schools in the given year completed English 9; one third passed with a C or better, and 17% passed with a B or better, by the end of 9th grade. By the end of 10th grade, 80% of the 9th-grade cohort students who stayed in the UC Partner schools completed English 10; 54% passed with a C or better, and 32% passed with a B or better. This indicates that a larger number of students who stayed at the UC Partner schools in 10th grade, as compared to 9th grade, completed and passed the English courses on track.

**Take rates, completion rates, and passing rates.** Further analyzing the completion and passing rate data for the mathematics and English college prep courses in 9th and 10th grades, we also identified the percentage of students who took/enrolled in a course but did not finish with a grade (i.e., took it but did not complete it). Therefore, completion is defined as having taken both semesters and having received a grade (A-F) in both semesters. We also calculated the pass rate for *only* those students who completed the course, instead of an overall pass rate, as reported above—the percentage of students who passed the course with a C or better divided by the number who stayed in the school.

In Tables 1.2-1.5, we report percentages for all the students who stayed in the UC Partner schools. Examining these data, we found that, overall, 66% of the students took both semesters of English 9 by the spring of 1996/97, the end of their first year in high school (column 1). Of the students who took the course, practically all of them completed with a grade: 66% completed both semesters of English 9 with a grade of A, B, C, D or F (column 2). However, only half of those students (33/66) who completed with any grade completed with a passing grade—33% passed both semesters with a C or better. We calculated this number by dividing column 3 by column 2. Additionally, we found that, overall, 33% of the cohort (66% minus 33%) passed both semesters with a grade lower than a C. This is calculated by subtracting column 3 from column 2. Furthermore, 17% of the 9th-grade cohort passed both semesters with a B or better by the spring of 1996/97 (column 4), which is a quarter of the students (17/66) who completed both semesters (column 4 divided by column 2).

The percentages of students who met the English benchmarks in the second year of high school in the Partner schools are slightly higher (see Tables 2.1-2.5). Eighty percent of the 9th-grade cohort of 1996/97 took both semesters of college prep English by the end of 1997/98, their second year in high school. Also 80% completed both semesters of the course with a grade, and 54% of the 9th-grade cohort completed with a C or better. This means that 26% of the cohort (80% minus 54%) completed with a D or F. Of those who completed both semesters of the course, 67.5% (54/80) passed with a C or better. Moreover, 32% of the cohort passed with a B or better, which translates to 40% (32/80) of those who completed the course passing with a B or better.

Examining the college prep math sequence for the 1996/97 9th-grade cohort, we found that nearly half (44%) took both semesters of Algebra I (or its equivalent, Integrated Math I) by the spring of 1996/97 (see Tables 3.1-3.5). This means that 56% of the students did not take both semesters of Algebra I, or its equivalent, by the spring of 1997. Almost all of those students who took both semesters received a grade (i.e., completed both semesters with a grade); 43% passed Algebra I, or its equivalent, with a grade of A, B, C, D, or F, whereas only 21% of the cohort of students passed with a C or better, and 10% of the cohort passed with a B or better. This means that 22% (43% minus 21%) of the students who completed Algebra I received a D or F. Of those who completed both semesters of Algebra I, 49% (21/43) passed with a C or better, and 23% (10/43) passed with a B or better. We found

slightly lower overall numbers for students in the 9th-grade cohort who took, completed, passed with a C or better, or passed with a B or better Geometry (or its equivalent) by the spring of 1997/98 (see Tables 4.1-4.5) and Algebra II (or its equivalent) by the spring of 1998/99 (see Tables 5.1-5.5).

Examining whether students in the 1996/97 9th-grade cohort took Chemistry by the end of their third year in high school, we found that one third (36%) took both semesters of Chemistry by the spring of 1998/99 (see Tables 6.1-6.5). This means that 64% of the students did not take both semesters of Chemistry by the end of their third year. Almost all those who took both semesters completed them with a grade; 36% completed Chemistry with a grade of A, B, C, D, or F, whereas only 21% of the students passed with a C or better, and 10% passed with a B or better. This means that 15% (36% minus 21%) of the cohort of students who completed Chemistry received a D or an F. Of those who completed both semesters of Chemistry, 58% (21/36) passed with a C or better, and 28% (10/36) passed with a B or better.

### **Analyzing the Original 1997/98 9th-Grade Cohort**

We also analyzed these same data for the 1997/98 cohort. Again, students in the 9th-grade cohort either had left the set of Partner schools, did not take a key benchmark course, finished the course with a D or an F, passed the course with a C, or passed it with a B or better. Figure B.1 in Appendix B illustrates graphically the percentages of students from the 1997/98 cohort that fall into each of these categories for each of the six benchmark courses.

We found that 31.2% of the 9th-grade cohort students were on track in the English requirement by the end of 9th grade—15.8% passed English 9 with a C, and 15.4% passed with an A or B. Students were systematically falling off track in completing the English 9 benchmark because they either were not taking the course or were failing the course (i.e., completing the course with a D or F). Of the 14,153 students, 32.8% did not take English 9, and 34.6% completed the course with a D or an F. For the Algebra I benchmark, 31.1% of the 9th-grade cohort was on track—17.3% passed with a C, and 13.8% passed with an A or B. Students were primarily off track in Algebra I because they were not taking the course (35.6%). (See Figures B.2 and B.3 in Appendix B.)

In addition, out of the 193 9th-grade cohort students that left the set of UC Partner schools during the 9th grade (1.4% of the 9th-grade cohort; see Appendix B, Table B1.1), 78.2% (151 students) remained in their encompassing district, and 21.8%

did not have data and could not be tracked. Of those students who left the set of Partner schools, the majority did not take Algebra I (52.8%) or English 9 (46.1%) by the end of 9th grade. Of those who left the set of Partner schools, only 49 students (25.4%) completed Algebra I by the end of 9th grade; 38 students passed with a D or F, 6 passed with a C, and 5 passed with A or B. Also, of those who left, 62 students (32.1%) completed English 9 by the end of 9th grade; 46 of these students passed with a D or F, 13 passed with a C, and 3 passed with an A or a B.

By the 10th grade, 31.7% of the 9th-grade cohort had left the UC Partner schools. Students were systematically off track in completing the English 10 benchmark because they had left the set of Partner schools (31.7%) or were failing with a D or F (17.3%). However, 43.2% of the 9th-grade cohort was on track with the English 10 benchmark—16.1% passed with a C, and 27.1% passed with an A or B. For the Geometry benchmark, 17.9% of the students were on track—10.8% passed with a C, and 7.1% passed with an A or B. Students were primarily off track in the Geometry benchmark because they were not taking the course (34.2%). (See Figures B.2 and B.3 in Appendix B.)

Interestingly, out of the 4,482 9th-grade cohort students that left the set of UC Partner schools during the 10th grade (31.7% of the 9th-grade cohort; see Appendix B, Table B2.1), only 12.5% (562 students) remained in their encompassing district, whereas 87.5% did not have data and could not be tracked. Of those students who left the set of Partner schools, many did not take Geometry by the end of 10th grade (9.1%) and very few (2.3%) took English 10 by the end of 10th grade. Only 154 students (3.5%) completed Geometry by the end of 10th grade: 98 students (2.2%) passed with a D or F, 39 students (0.9%) passed with a C, and 17 students (0.4%) passed with an A or B. However, 460 students (10.3%) completed English 10 by the end of 10th grade: 188 students (4.2%) passed with a D or F, 126 students (2.8%) passed with a C, and 146 students (3.3%) passed with an A or B.

By 11th grade, 45.5% of the 9th-grade cohort had left the set of Partner schools. Leaving the set of Partner schools (45.5%) and not taking the Algebra II course (36.8%) or not taking Chemistry (32.5%) were the main reasons that the cohort students were off track. By the end of 11th grade, 9.9% of the 9th-grade cohort students were on track in Algebra II, and 12.3% were on track for Chemistry.

Interestingly, out of the 6,440 9th-grade cohort students that left the set of UC Partner schools during the 11th grade (45.5% of the 9th-grade cohort; see Appendix



B, Table B5.1), only 8.7% (560 students) remained in their encompassing district, whereas 91.3% did not have data and could not be tracked. Of those students who left the set of Partner schools, 7.2% did not take Algebra II and 6.5% did not take Chemistry by the end of 11th grade. Only 96 students (1.6%) completed Algebra II by the end of 11th grade: 49 students (0.8%) passed with a D or F, 24 students (0.4%) passed with a C, and 23 students (0.4%) passed with an A or B. For Chemistry, 139 students (2.2%) completed the course by the end of 11th grade: 59 students (0.9%) passed with a D or F, 44 students (0.7%) passed with a C, and 36 students (0.6%) passed with an A or B.

**Summary.** Again, these data indicate two main reasons why students were systematically falling off track in meeting all the individual benchmark courses at certain grade levels. First, students were leaving the set of UC Partner schools. Second, the majority of students were not taking the benchmark courses during the early years of high school.

### **Analyzing Students From the 1997/98 Cohort Who Stayed at UC Partner Schools**

**Overall completion and passing rates.** Next, we looked more in depth at the students in the 9th-grade cohort of 1997/98 who stayed in the UC Partner schools. We found, as we did in the 1996/97 cohort data, that the students who stayed had higher completion rates (i.e., completing the course with any grade, A-F) and slightly higher passing rates (i.e., completing the course with a C or better) for Algebra I as compared to Geometry or Algebra II. However, in 1997/98 these differences were more pronounced than in 1996/97. The completion and passing rates for Algebra I were higher in 1997/98 compared to the 1996/97 Algebra I rates. Also the completion and passing rates for Geometry were higher in 1997/98 as compared to 1996/97. However, the completion and passing rates for Algebra II were similar in 1996/97 and 1997/98. This indicates a better overall pattern of completion and passing rates in mathematics in the 1997/98 cohort than in the 1996/97 cohort in the 9th- and 10th-grade years, except for Algebra II by the end of 11th grade. In the mathematics series (see Appendix B, Figure B.2), roughly two thirds of the 9th-grade cohort students who stayed in the UC Partner schools in the given year completed Algebra I, one half completed Geometry, and one third completed Algebra II. Roughly 18-32% of the students who stayed in the schools passed with a C or better, and about 8-14% passed with a B or better. See Appendix B, Figures B.2 and B.3, for the completion and passing rates for math and English courses for the 9th-grade cohort students who remained in the UC Partner schools.

In the English courses (see Appendix B, Figure B.3), on the other hand, the pattern from 9th to 10th grade improved in all three areas: completed, passing with a C or better, and passing with a B or better. We found that about two thirds of the 9th-grade cohort students who stayed in the UC Partner schools in the given year completed English 9, one third passed with a C or better, and 16% passed with a B or better. In the 10th grade, 89% of the 9th-grade cohort students who stayed in the UC Partner schools completed English 10, 63% passed with a C or better, and 40% passed with a B or better.

**Take rates, completion rates, and passing rates.** We found for the English college prep courses in 9th and 10th grades that, overall, 67% of the students took both semesters of English 9 by the spring of 1997/98, the end of their first year in high school (see Appendix B, Tables B1.1-B1.5). Of the students who took the course, practically all completed with a grade: 66% completed both semesters of English 9 with a grade of A, B, C, D or F. However, a little less than half of those students (32/66) who completed with any grade completed with a passing grade—32% passed both semesters with a C or better. This means that, overall, 34% of the cohort (66% minus 32%) passed both semesters with a grade lower than a C. Moreover, 16% of the 9th-grade cohort passed both semesters with a B or better by the spring of 1997/98, which is a quarter of the students (16/66) who completed both semesters.

The percentages of students who met the English benchmarks in the second year of high school in the Partner schools are again slightly higher (see Appendix B, Tables B2.1-B2.5). A total of 89% of the 9th-grade cohort of 1997/98 who remained at the UC Partner schools took both semesters of college prep English by the end of 1998/99, their second year in high school. Also, 89% completed both semesters of the course with a grade. A total of 63% of the 9th-grade cohort passed with a C or better. This means that 26% of the cohort (89% minus 63%) completed with a grade of D or F. Of those who completed both semesters of the course, 71% (63/89) passed with a C or better. Moreover, 40% of the cohort passed with a B or better, which translates to 45% (40/89) of those who completed the course passing with a B or better.

Examining the college prep math sequence for the 1997/98 9th-grade cohort, we found that two thirds (64%) took both semesters of Algebra I (or its equivalent, Integrated Math I) by the spring of 1997/98 (see Appendix B, Tables B3.1-B3.5). This means that 36% of the students in the cohort that remained at the UC Partner schools did not take both semesters of Algebra I, or its equivalent, by the spring of

1998. Almost all of those students who took both semesters completed the course (i.e., completed both semesters with any grade): 64% completed Algebra I, or its equivalent, with a grade of A, B, C, D, or F. Only 32% of the cohort of students passed with a C or better, and 14% of the cohort passed with a B or better. This means that 32% (64% minus 32%) of the students who completed Algebra I received a D or F. Of those who completed both semesters of Algebra I, 50% (32/64) passed with a C or better, and 22% (14/64) passed with a B or better. In the 1997/98 cohort, we found lower completion and passing rates for students in the 9th-grade cohort who took, completed, passed with a C or better, or passed with a B or better Geometry (or its equivalent) by the spring of 1998/99 (refer to Appendix B, Tables B4.1-B4.5) and in Algebra II (or its equivalent) by the spring of 1999/00 (refer to Appendix B, Tables B5.1-B5.5).

Examining whether students in the 1997/98 9th-grade cohort who remained at the UC Partner schools took Chemistry by the end of their third year in high school, we found that 40% took both semesters of Chemistry by the spring of 1999/00 (refer to Appendix B, Tables B6.1-B6.5). This means that 60% of the students did not take both semesters of Chemistry by the end of their third year. Almost all of those students who took both semesters completed the course (i.e., completed both semesters with a grade): 40% completed Chemistry with a grade of A, B, C, D, or F. Only 22% of the students passed with a C or better, and 10% passed with a B or better. This means that 18% (40% minus 22%) of the cohort of students who completed Chemistry received a D or an F. Of those who completed both semesters of Chemistry, 55% (22/40) passed with a C or better, and 25% (10/40) passed with a B or better.

### **Summary of the Data for the Two 9th-Grade Cohorts**

Overall, we found that, in the UC Partner schools, the taken, completion, and passing patterns in the 1996/97 9th-grade cohort were similar to those in the 1997/98 cohort for college prep English (English 9 and English 10) and Algebra II. However, the Algebra I and Geometry taken, completion, and passing rates in the UC Partner schools were much higher in the 1997/98 9th-grade cohort as compared to the 1996/97 9th-grade cohort. Additionally, the cohort sizes over time were very consistent, indicating that a similar number of students were transient in the 2 years and across the grades.

The bottom line is that we identified very few students who were taking and successfully passing the six college preparatory courses by the end of a given grade level, particularly in upper division courses such as Chemistry and Algebra II. In general, we found a decreasing trend across the taken, completion, and passing rates in mathematics as the courses build in knowledge over the grade levels. Specifically, we found that in mathematics, for those students who remained at the UC Partner schools each year, about two thirds took the required math course each year, 32-64% passed the course with a C, and 8-14% passed with a B or better. Overall in English, we found an increasing trend across the taken, completion, and passing rates as the courses move up in grade level (i.e., English 9, English 10, etc.). Specifically, we found that for those students who remained at the UC Partner schools each year, about two thirds took the required 9th-grade English course, one third passed the course with a C, and 16% passed with a B or better by the end of grade 9. By 10th grade, for those who remained in the UC Partner schools, about 89% took the required 10th-grade English course, 63% passed with a C, and 40% passed with a B or better. By 11th grade, for those who remained in the UC Partner Schools, 40% of the students took and completed Chemistry, roughly 22% passed with a C, and 10% passed with an A or B.

Overall, we found, across two cohorts of data, that a large majority of the students in the UC Partner schools are not successfully completing the college prep curriculum. Large numbers of students leave the UC Partner schools over the 4 years of high school. And for the students who remain at the UC Partner schools, there are large disparities in the number of students who take the A-G courses and the number of students who complete them with passing or competitive grades.

## **VI. Do On-Track and Off-Track Patterns Differ by Ethnicity or Other Background Characteristics?**

Understanding that course-taking patterns could differ by ethnicity or according to other background characteristics, we reviewed whether, and how successfully, African American, Hispanic, White and Asian 9th-grade cohort students fared in the six key benchmark courses. These data indicate whether students of different ethnic backgrounds were systematically staying on track or falling off track at different points. Refer to Figures 5 through 8 for ethnic course-taking patterns. And refer to Tables X.3 through X.5 for each of the six benchmarks crossed by gender, LEP status, and Free/Reduced Lunch status.

## African American Students

We found that 26.9% of African American 9th-grade cohort students from 1996/97 were on track in English by the end of 9th grade. African American students were systematically falling off track in completing the English 9 benchmark because they were not taking the course (34.6%) or they were failing the course (34.9%) by the end of 9th grade. For the Algebra I benchmark, 14.9% of the African American 9th-grade cohort students were on track by the end of 9th grade. African American students were off track in Algebra I primarily because 60.2% did not take the course by the end of 9th grade. Remember that these calculations assess whether a student completed a course by the end of a certain grade level. If a student, for example, completed Algebra I in the 8th grade, then she is included in those that completed Algebra I by the end of 9th grade. There were 3,284 African American students in the overall 9th-grade cohort (see Figure 5).

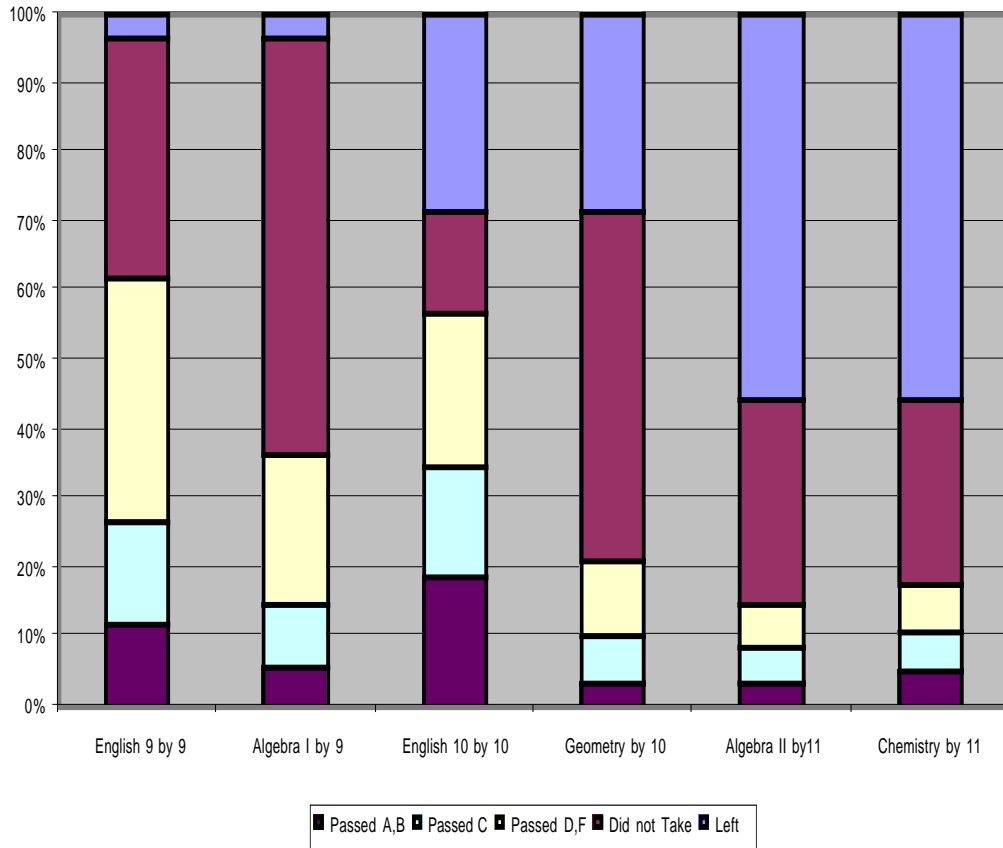


Figure 5. UC Partnership schools: Proportion of African American students from the 1996/97 cohort who left, did not take, or passed 6 benchmark courses.

By the 10th grade, 28.5% of the African American 9th-grade cohort students were no longer in the UC Partner schools. African American students did not meet the English 10 benchmark both because 28.5% were no longer in the set of UC Partner schools and also because 22.4% failed the English 10 course. In mathematics with the Geometry benchmark, a large percentage of the African American students (50.3%) did not take the course by the end of 10th grade. However, 34.5% were on track in English 10, and 10.3% were on track in Geometry, at the end of 10th grade.

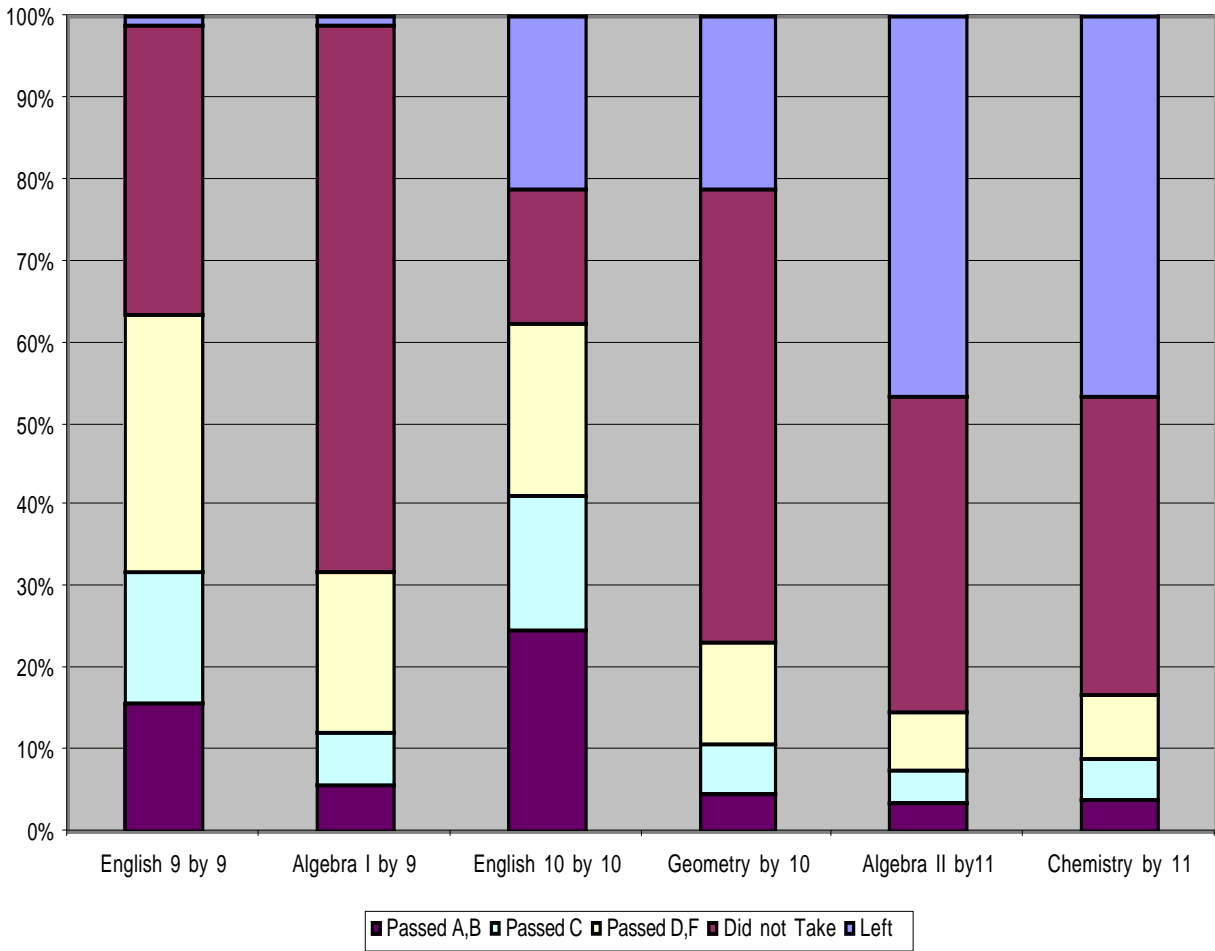
By 11th grade, 55.7% of the African American 9th-grade cohort students were no longer in the UC Partner schools, 29.6% did not take Algebra II, and 26.7 did not take Chemistry. A total of 8.5% were on track in Algebra II, and 10.8% were on track in Chemistry, by the end of 11th grade.

### **Hispanic Students**

We found that 33.0% of Hispanic 9th-grade cohort students from 1996/97 were on track in English at the end of 9th grade. Hispanic students were systematically falling off track in completing the English 9 benchmark because they were not taking the course (33.7%) or they were failing the course (31.9%) by the end of 9th grade. For the Algebra I benchmark, 21.1% of the Hispanic 9th-grade cohort students were on track at the end of 9th grade. Hispanic students were off track in Algebra I primarily because 54.7% did not take the course by the end of 9th grade. There were 10,727 Hispanic students in the overall 9th-grade cohort (see Figure 6).

By the 10th grade, 20.2% of the Hispanic 9th-grade cohort students were no longer in the set of UC Partner schools. Hispanic students did not meet the English 10 benchmark both because 20.2% were no longer in the schools and because 20.7% failed the English 10 course by the end of 10th grade. In mathematics with the Geometry benchmark, however, a large percentage of the Hispanic students (54.1%) did not take the course by the end of 10th grade. A total of 43.2% were on track in the English 10 course, and 12.7% were on track in Geometry, by the end of 10th grade.

By 11th grade, 44.8% of the Hispanic 9th-grade cohort students were no longer in the UC Partner schools, and roughly 40% did not take either Algebra II or Chemistry: 38.2% did not take Algebra II, and 36.0 did not take Chemistry by the end of 11th grade. A total of 9.4% were on track in the Algebra II course, and 10.7% were on track in Chemistry, by the end of 11th grade.



*Figure 6.* UC Partnership schools: Proportion of Hispanic students from the 1996/97 cohort who left, did not take, or passed 6 benchmark courses.

### White Students

There were only 219 White students in the overall 9th-grade cohort from 1996/97. With the understanding that the sample size is small, we found that 57.1% of White 9th-grade cohort students were on track in English at the end of 9th grade. White students were systematically falling off track in completing the English 9 benchmark because they were not taking it (22.4%), or they were failing the course (19.6%) by the end of 9th grade. For the Algebra I benchmark, 40.4% of the White 9th-grade cohort students were on track at the end of 9th grade. White students were off track in Algebra I primarily because 42.0% did not take the course by the end of 9th grade (see Figure 7).

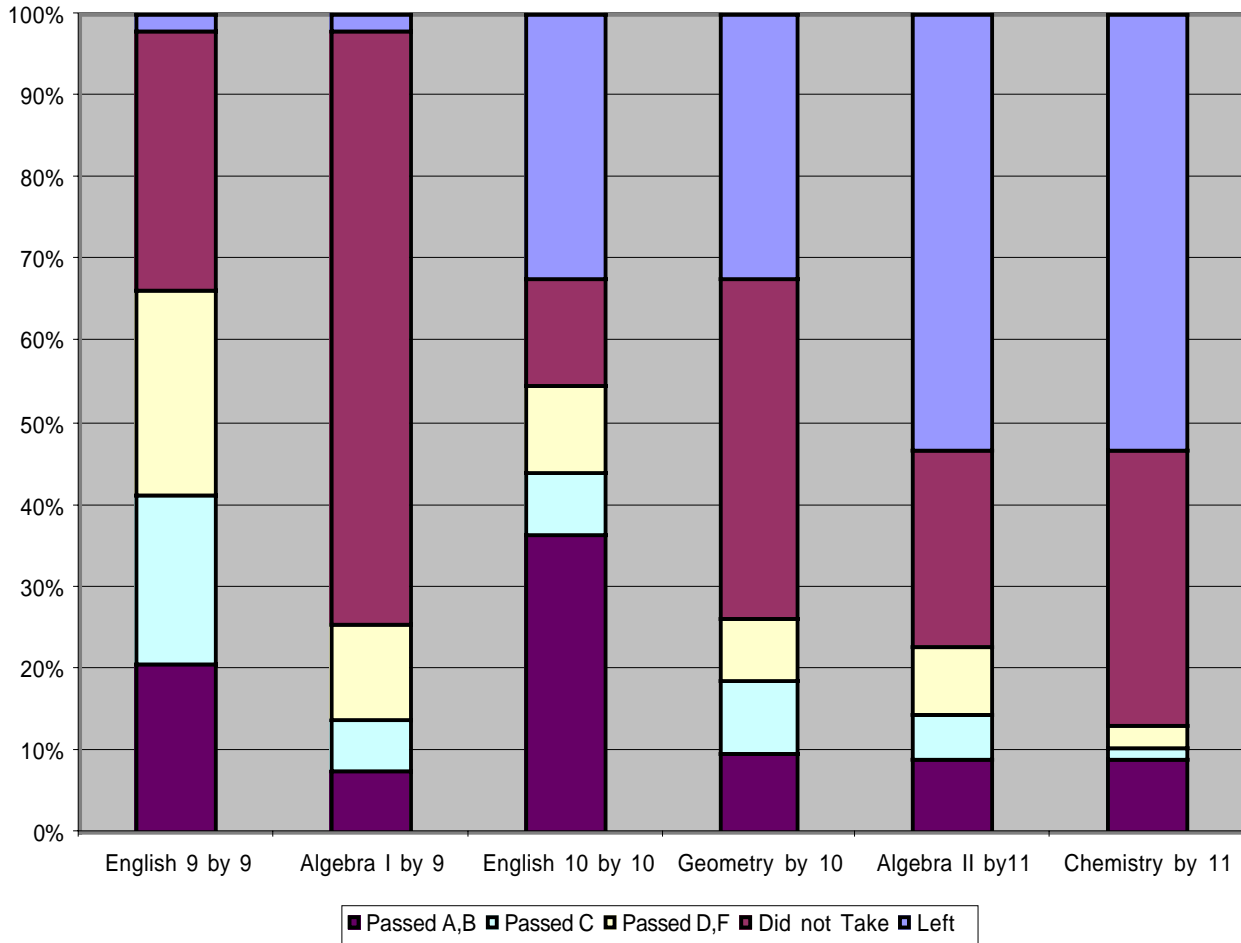


Figure 7. UC Partnership schools: Proportion of White students from the 1996/97 cohort who left, did not take, or passed 6 benchmark courses.

By the 10th grade, 25.6% of the White 9th-grade cohort students were no longer in the set of UC Partner schools. This was the main reason that White students did not meet the English 10 benchmark. In mathematics with the Geometry benchmark, however, a large percentage of the White students (31.5%) did not take the course by the end of 10th grade. A total of 56.1% were on track in the English 10 course, and 34.3% were on track in Geometry, at the end of 10th grade.

By 11th grade, 41.6% of the White 9th-grade cohort students were no longer in the UC Partner schools. Also, 20.1% did not take Algebra II, and 28.3% did not take Chemistry, by the end of 11th grade. A total of 29.7% were on track in the Algebra II course, and 26.1% were on track in Chemistry, by the end of 11th grade.



## Asians Students

There were only 101 Asian students in the overall 9th-grade cohort from 1996/97. With the understanding that the sample size is very small, we found that 70.3% of Asian 9th-grade cohort students were on track in English at the end of 9th grade. The remaining percentage of Asian students was equally split across the following categories: did not take English 9, completed it with a D or F, or passed it with a C by the end of 9th grade. For the Algebra I benchmark, 58.4% of the Asian 9th-grade cohort students were on track by the end of 9th grade. Asian students were off track in Algebra I primarily because 26.7% did not take the course by the end of 9th grade (see Figure 8).

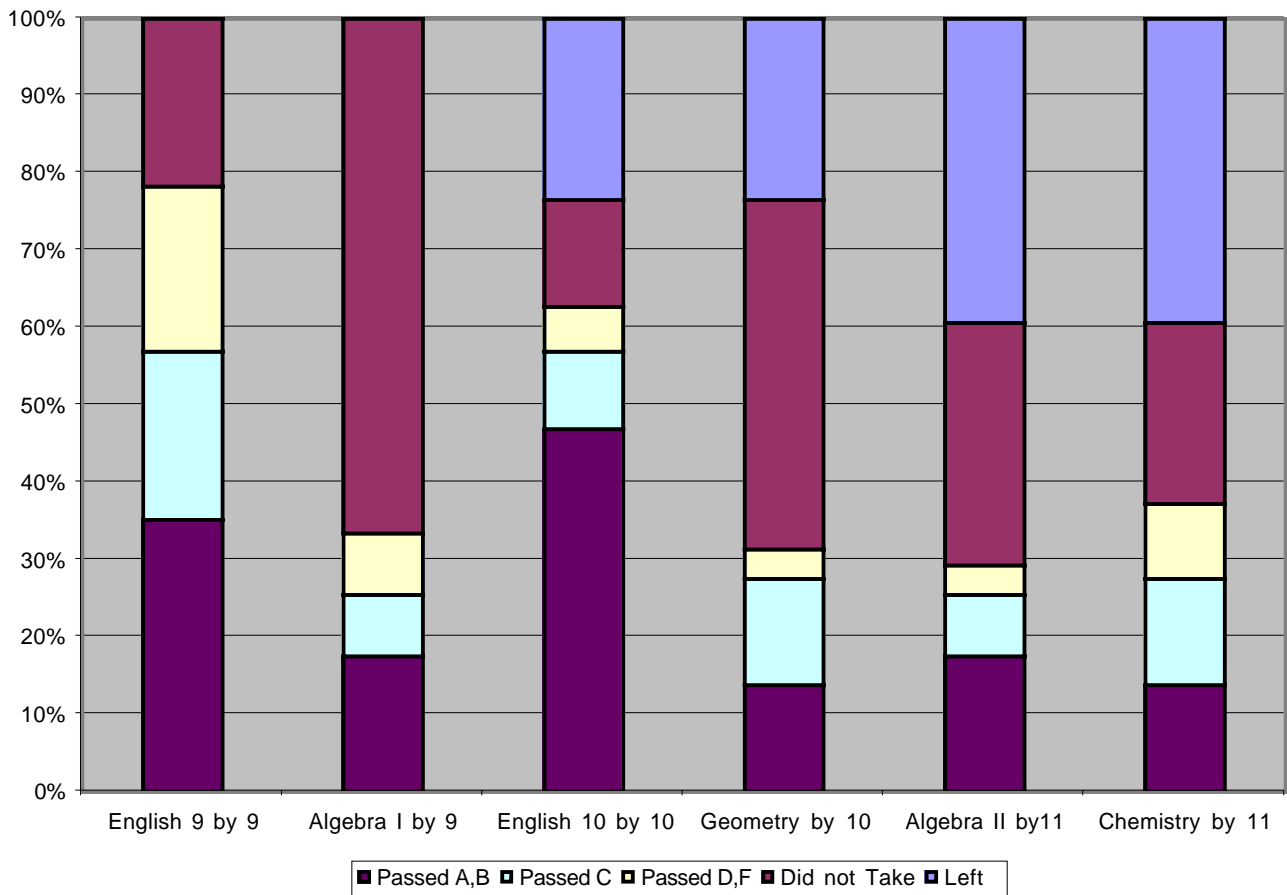


Figure 8. UC Partnership schools: Proportion of Asian students from the 1996/97 cohort who left, did not take, or passed 6 benchmark courses.

By 10th grade, 14.9% of the Asian 9th-grade cohort students were no longer in the UC Partner schools. This is the main reason that Asian students did not meet the English 10 benchmark. In mathematics with the Geometry benchmark, however, a large percentage of the Asian students (36.6%) did not take the course by the end of 10th grade. A total of 73.3% were on track in the English 10 course, and 43.6% were on track in Geometry, at the end of 10th grade.

By 11th grade, 30.7% of the Asian 9th-grade cohort students were no longer in the UC Partner schools. Also, 20.8% did not take Algebra II, and 20.8% did not take Chemistry, by the end of 11th grade. A total of 44.6% were on track in the Algebra II course, and 38.6% were on track in Chemistry, at the end of 11th grade.

Overall, analyzing course-taking patterns by ethnicity, the African American 9th-grade cohort students fared slightly worse than the Hispanic 9th-grade cohort students in terms of being on track at the given grade levels, as well as having higher rates of (a) attrition, (b) not taking the benchmark courses, and (c) failing the courses at the given grade levels. The White and Asian student populations within the 9th-grade cohort of 1996/97 fared better than the Hispanic and African American students; however, those populations are also very small in size.

### **Other Background Characteristics**

**Gender.** In general, we found that females had much higher patterns of taking, completing, and passing all of the benchmarks courses: English 9 by 9th grade, English 10 by 10th grade, Algebra I by 9th grade, Geometry by 10th grade, Algebra II by 11th grade, and Chemistry by 11th grade (see Tables 1.3, 2.3, 3.3, 4.3, 5.3, and 6.3). The gender differences are larger across the English courses than the math or science courses.

**LEP status.** We also found that approximately 20% more non-LEP students as compared to LEP students were taking, completing, and passing English 9 by the end of 9th grade and English 10 by the end of 10th grade. Non-LEP students were also faring better in terms of taking, completing, and passing Algebra I by the end of 9th grade, Geometry by 10th grade, Algebra II by 11th grade and Chemistry by 11th grade. More non-LEP students took and completed these upper division benchmark courses, and a higher percentage of the non-LEP students also passed these courses with a C or better.

**Free/reduced lunch status.** Students who received free/reduced lunch had taken, completion and passing rates (passing with a C or better) similar to those of

students who did not receive free/reduced lunch for five of the six benchmark courses. Specifically, students who received free/reduced lunch were not taking, completing or passing Algebra II at the same rate as those not receiving free/reduced lunch. However, their taken, completion, and pass rates were the same for English 9 and Algebra I by the end of 9th grade, English 10 and Geometry by the end of 10th grade, and Chemistry by the end of 11th grade.

In general, analyzing course-taking patterns by background characteristics, such as gender and LEP status in 9th grade, highlights different course-taking patterns among high school students. Large differences across gender and LEP status in 9th grade were found across the key English, math, and science college prep courses.

### **Summary**

Overall, we found, across two cohorts of data, that a large majority of the students in the UC Partner schools are not successfully completing the college prep curriculum. Large numbers of students leave the UC Partner schools over the 4 years of high school. And for the students who remain at the UC Partner schools, there are large disparities in the number of students who take the A-G courses and the number of students who complete them with passing or competitive grades. We also found that these disparities are even larger for males and LEP students. Particularly, LEP students have a more difficult time taking and completing the English benchmarks. In addition, we found that African American students do not take or complete Algebra I by the end of 9th grade at as high a rate as Hispanic students. Also African American students' pass rates for Algebra I and English 9 by the end of 9th grade, and English 10 by the end of 10th grade, are lower compared with those of Hispanic students. However, the taken, completion, and pass rates for African American and Hispanic students are similar (and very low) for the upper division benchmark courses of Algebra II and Chemistry by the end of 11th grade.

## **VII. Discussion and Conclusions**

A-G completion indicates how well schools prepare high school students with a comprehensive educational background that makes them eligible for the University of California. Remember that A-G completion is necessary but not sufficient for admission. With this in mind, we analyzed the taken, completion and passing rates for six specific A-G courses in the set of UC Partner schools to answer the following research questions:

- How does A-G completion for students in the School/University Partnership schools compare to A-G completion for students in the other schools in their encompassing school district?
- What proportion of students in the UC Partner schools are on track and off track in completing six key A-G requirements by particular grade levels, referred to as benchmark courses?
- What are the primary reasons for students being off track in completing the A-G course requirements?
- Do the on-track and off-track patterns differ by ethnicity or other background characteristics within the UC Partner schools?

Overall, we found that a very small percentage of the 9th-grade cohort students stayed on track for each of the benchmarks individually, and even fewer stayed on track when the benchmark courses were analyzed collectively. We found that 14.4% of the 9th-grade cohort in 1996/97 (which consisted of 14,390 students in the UC Partner schools) were on track at the end of 9th grade in both English and math college prep courses, and only 7.3% of the cohort were still on track in the English and math series at the end of 10th grade. In the end, a total of 5.0% of the 9th-grade cohort were A-G eligible by the end of 12th grade.

Interestingly, we found that, in the encompassing school district, 7.2% of the 9th-grade cohort from 1996/97 (which consisted of 48,589 students) were eligible by the end of 12th grade as compared to 5.0% of the 9th-grade cohort in the UC Partner schools. By investigating A-G completion rates by ethnicity, we found that the eligibility rates for White, Asian, and Hispanic students, but not African American students, were higher in the UC Partner schools than in their district. Because Hispanic students make up a large portion of the students in the UC Partner schools, and because Hispanics as an ethnic group have a low A-G completion rate as compared to other ethnic groups, the overall A-G completion rate in the UC Partner schools (5.0%) is lower than in the encompassing district (7.2%).

Also, we assessed how many of the A-G eligible students were competitively eligible. We found that, overall, in the UC Partner schools, 0.6% of the 9th-grade cohort achieved competitive A-G eligibility by the end of 12th grade; 82 out of 14,390 students. In the UC Partner schools' encompassing school district, 1.1% of the 9th-grade cohort from 1996/97 were competitively A-G eligible by the end of 12th grade; 531 out of 48,589 students. Moreover, the average A-G 10-12 weighted GPA for the competitively eligible students in the UC Partner schools was 4.17, and for

the competitively eligible students in the encompassing district, the average GPA was similar at 4.22. This indicates that the competitively eligible students in the UC Partner schools are the same caliber of student as those in their encompassing district (this is true by definition given the same number of students).

Additionally, because so few UC Partner school students stayed on track, the majority (95%) of the students in the 9th-grade cohort in the UC Partner schools were not successfully completing the college prep curriculum and were not achieving A-G eligibility by the end of 12th grade. First, large numbers of students left the set of UC Partner schools over the course of high school (62.6% of the 9th-grade cohort). Secondly, many students who remained at the UC Partner schools did not even attempt to take the A-G courses. We found that in 9th grade, 33.5% of the cohort did not take the UC-approved English 9 course, and 55.5% did not take Algebra I, or its equivalent, by the end of 9th grade. By the end of 10th grade, of those who stayed, 19.7% did not take English 10, and 67.8% did not take Geometry. By the end of 11th grade, of those who stayed, 67.8% did not take Algebra II and 63.7% did not take Chemistry. Therefore, there were two main reasons—leaving the set of UC Partner schools and not taking the A-G courses—that were systematically keeping students from becoming A-G eligible at the UC Partner schools.

In both cohorts of data, therefore, we found that a large majority of the students in the UC Partner schools were not successfully completing the college prep curriculum. For the students who remained at the UC Partner schools, we also found that there were large disparities in the number of students who took the A-G courses and those who completed them with passing or competitive grades.

Importantly, we also found that these disparities in taking and completing the key courses were even larger for males and LEP students. Particularly, LEP students had a more difficult time taking and completing the English benchmarks by the given grade levels. By ethnicity, we found that African American students did not take or complete Algebra I by the end of 9th grade at as high of a rate as Hispanic students. Also African American students' pass rates for Algebra I and English 9 by the end of 9th grade and English 10 by the end of 10th grade were lower than those of Hispanic students. The taken, completion, and passing rates for African American and Hispanic students were similar (and very low), however, for the upper division benchmark courses of Algebra II and Chemistry by the end of 11th grade.

These findings raise many issues of concern for the University of California, UC Partner schools, and the district. We mention a few of the most obvious here. First, schools cannot afford to have so many students fall off track toward A-G completion in the early years of high school because of the natural winnowing effect of each of the 15 A-G requirements. The A-G courses in all the subject areas build on each other. As a result, fewer and fewer students are ready and prepared to enroll in the required courses in each subject as they move through the grade levels. Students need to be attempting the A-G courses at the given grade levels, and more important, they need to be prepared to take and pass the A-G college preparatory courses at each grade level. Being prepared to take English 9 and Algebra I by the end of 9th grade, as a first step, is therefore vital. This points to the importance of middle school preparation and instruction as a first avenue for schools. Being ready for the high school college prep curriculum is crucial if students are to stay on track during high school and attain A-G eligibility by 12th grade.

The need for stronger middle school preparation has been broadly recognized by the UC and the Partner schools. Monies have been directed toward the entire K-12 pipeline structure and are being managed by the outreach programs supported by the University of California and the Partnership schools. However, these efforts need to be coupled with an urgency and with concerted action because of the current economic and political pressures surrounding the outreach monies. Legislators need to fully understand the need for middle school preparation and for completion of Algebra I and English 9 courses by the end of 9th grade, as well as how these relate to UC eligibility.

Second, along with creating a sense of urgency and action for stronger middle school preparation, Partnership programs in collaboration with their districts need to consider how they could better use data such as those reported here to inform their efforts. Discussing specific data on who is meeting and not meeting crucial college prep courses would provide important diagnostic and guidance insights to support action. The benchmark data provided in this report could assist the Partnerships, their schools, and the district in delivering an important message on the need for stronger middle school preparation, as well as additional assistance in academic guidance. These benchmark data highlight the specific target populations for academic guidance and development across *all* grades, 9 through 12, and not just 9th grade. The benchmark data indicate the specific numbers of students in different predicaments on the path toward A-G completion. For example, they identify the

number of 9th graders who passed Algebra I in 8th and 9th grades, but who are having trouble completing or passing English 9 by the end of 9th grade. They identify those students who are on track in math, but not in English at the end of 9th grade or the end of 10th grade. They identify the large number of students who are not enrolled in Algebra I or English 9 by the end of 9th grade. They also identify the students who enrolled in, but did not complete, Algebra I or English 9 with a grade or with a passing grade by the end of 9th grade. Overall, these types of benchmark data are very important for the University, districts, schools, counselors, and UC Partnerships to understand in their efforts to assist their schools and students in achieving A-G eligibility and UC eligibility. In general, these types of information assist the school staff and the Partnership practitioners in identifying which trends of course-taking patterns exist at their school and, more important, which groups of students need attention in pursuing A-G eligibility and ultimately UC eligibility.

Furthermore, the UC Partnerships and their districts need to consider feasible options for helping students who are not on track to catch up that complement and support the guidance already in place at the schools and districts. Additional University collaboration in this area may also show future benefits.

Third, in addition to the students who are not enrolling and completing the A-G courses, there are many students not passing the A-G course with competitive grades. Of those students who were enrolled in the A-G courses, there were large disparities in the numbers of students who completed a course and who completed the course with passing or competitive grades by a given grade level. Pass rates for those who completed the courses were very low. Students not learning the material in the A-G courses is also keeping them from meeting the benchmarks (individually and collectively). English pass rates for those who completed the English courses were 50% for English 9 and 67% for English 10, and math pass rates for those who completed the math courses were roughly 48-58% for Algebra I, Geometry, and Algebra II. Passing with a C is also a minimum. Most students will need at least a B or better to be admitted to a UC campus, particularly at the more competitive schools like UCLA and Berkeley.

Fourth, it is very important to recognize that the A-G completion rates by ethnicity for Hispanic, White and Asian students, but not African American students, were higher in the UC Partner schools than in their district. This suggests that, as a group, Asian, White and Hispanic students are performing better in the UC Partner schools than in their district. Despite this finding, the UC Partner schools

still need to expand their efforts and increase the overall number of underrepresented minority students achieving A-G eligibility and competitive A-G eligibility, even though their Hispanic, White, and Asian high school students are faring as well as, or slightly better than, students of the same ethnic background within their encompassing district.

Finally, there is a strong need for additional collaborative research that can provide a more realistic, concrete view of how many and what type of students are leaving the set of UC Partner schools and what type of students are not taking the A-G courses. The numbers of students who are leaving the set of UC Partner schools and those that are not taking the A-G required courses are sizeable and should be a concern for the University of California, its Partner schools and their districts. Therefore, we are currently investigating what type of student characteristics and behaviors lead to (or predict) not taking a necessary A-G requirement (such as Algebra I or the Lab Science requirement), not completing both semesters of a necessary course, or not passing both semesters of a necessary course with a B or better. Moreover, we are interested in additional collaborative research that could inform improvement in the quality of A-G courses and their effectiveness for students—for example, studies relating teacher characteristics and knowledge levels to course quality and performance. Such studies could help us to understand and improve the professional development for teachers in key subject matter courses. Both outlining the predictors of these patterns and improving on the professional development of teachers in key subject areas can help schools and districts better serve their students along the way toward A-G completion and UC eligibility.

In closing, the course-taking patterns outlined in this report provide a first step in setting the stage for gaining a set of diagnostic tools to be used both to increase the number of students on track and to keep students on track towards achieving A-G eligibility by the end of 12th grade. These data reveal that mobility and not taking or completing the A-G courses have resulted in very small percentages of students staying on track and attaining A-G completion by the end of 12th grade. As a result, the UC Partner schools need to focus even more on preparing students in the early grades (7th-9th grades) for the high school college prep curriculum, particularly Algebra I and English 9 by the end of 9th grade. Schools also need to focus on guiding students toward options that help them double up courses, skip electives, and use the summer months as a bridge. Timing of courses, particularly in the mathematics college prep sequence and the English sequence for LEP students, is



crucial. Additionally, despite the very small number of students in the UC Partner schools who attained A-G completion by the end of 12th grade, the A-G eligibility rates for Hispanic, White, and Asian students, but not African American students, were higher in the UC Partner schools than in their encompassing school district. Finally, these results represent the starting point from which future improvements should be expected. Benchmarks for A-G course requirements are basic indicators of success, and the UC system, their Partner schools, and school districts should seem themselves as jointly accountable for increasing current rates.

## APPENDIX A

### 1999-2000 Students in Partner Schools in Grade 12 “In the Grade 9 Cohort” Compared to “Not in the Grade 9 Cohort” by Demographic Characteristics

Table A.1

		Ethnicity							
		American Indian	Asian	African American	Hispanic	White	Filipino	Pacific Islander	Total
Not in 96-97 cohort	Count	3	19	531	1,125	51	4		1,733
	%	0	1	31	65	3	0		100
In 96-97 cohort	Count	10	62	1,064	4,111	115	13	4	5,379
	%	0	1	20	76	2	0	0	100
Total	Count	13	81	1,595	5,236	166	17	4	7,112
	%	0	1	22	74	2	0	0	100

Table A.2

		Gender			
			Male	Female	Total
Not in 96-97 cohort	Count		904	829	1,733
	%		52	48	100
In 96-97 cohort	Count		2,459	2,920	5,379
	%		46	54	100
Total	Count		3,363	3,749	7,112
	%		47	53	100

Table A.3

		LEP status			
			LEP	Non-LEP	Total
Not in 96-97 cohort	Count		467	1,266	1,733
	%		27	73	100
In 96-97 cohort	Count		719	4,660	5,379
	%		13	87	100
Total	Count		1,186	5,926	7,112
	%		17	83	100

Table A.4

		Free/reduced lunch			Total
		Non-free/ reduced	Free/ reduced	Missing	
Not in 96-97 cohort	Count	549	1,128	56	1,733
	%	32	65	3	100
In 96-97 cohort	Count	1,378	3,829	172	5,379
	%	26	71	3	100
Total	Count	1,927	4,957	228	7,112
	%	27	70	3	100

1999-2000 Students in Partner Schools in Grade 12 “In the Grade 9 Cohort”  
Compared to “Not in the Grade 9 Cohort” by Previous Stanford 9 Results

Table A.5

		Reading total percentile	Math total percentile	Language total percentile
Not in 96-97 cohort	Mean	23.52	30.92	29.65
	N	1,062	1,086	1,042
	Std. Deviation	20.84	21.51	21.93
In 96-97 cohort	Mean	30.08	37.05	35.98
	N	4,818	4,820	4,774
	Std. Deviation	22.16	24.03	23.09
Total	Mean	28.90	35.93	34.85
	N	5,880	5,906	5,816
	Std. Deviation	22.07	23.70	23.01

Table A.6

		Reading percentile				Total
		Low thru 25th	26th to 50th	51 thru 75th	Over 75th	
Not in 96-97 cohort	Count	682	249	93	38	1,062
	%	64	23	9	4	100
In 96-97 cohort	Count	2,439	1,485	6,36	258	4,818
	%	51	31	13	5	100
Total	Count	3,121	1,734	729	296	5,880
	%	53	29	12	5	100

Table A.7

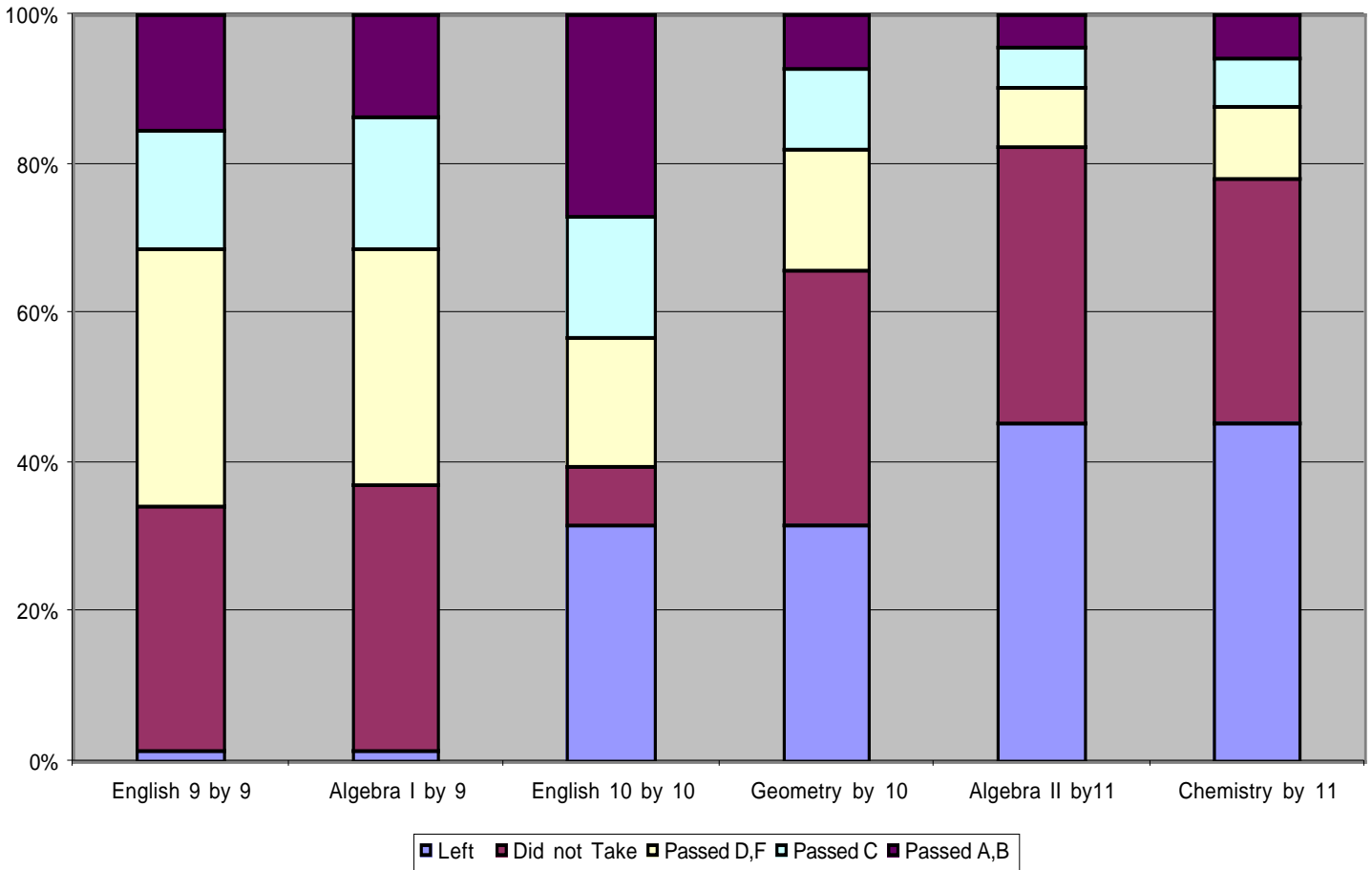
		Math percentile				
		Low thru 25th	26th to 50th	51 thru 75th	Over 75th	Total
Not in 96-97 cohort	Count	540	340	157	49	1,086
	%	50	31	14	5	100
In 96-97 cohort	Count	1,905	1,544	941	430	4,820
	%	40	32	20	9	100
Total	Count	2,445	1,884	1,098	479	5,906
	%	41	32	19	8	100

Table A.8

		Language percentile				
		Low thru 25th	26th to 50th	51 thru 75th	Over 75th	Total
Not in 96-97 cohort	Count	582	272	140	48	1,042
	%	56	26	13	5	100
In 96-97 cohort	Count	2,014	1,559	892	309	4,774
	%	42	33	19	6	100
Total	Count	2,596	1,831	1,032	357	5,816
	%	45	31	18	6	100

## APPENDIX B

### Analyses for the 1997/98 9th-Grade Cohort



*Figure B.1.* UC Partnership schools: Proportion of students from the 1997/98 cohort who left, did not take, or passed 6 benchmark courses.

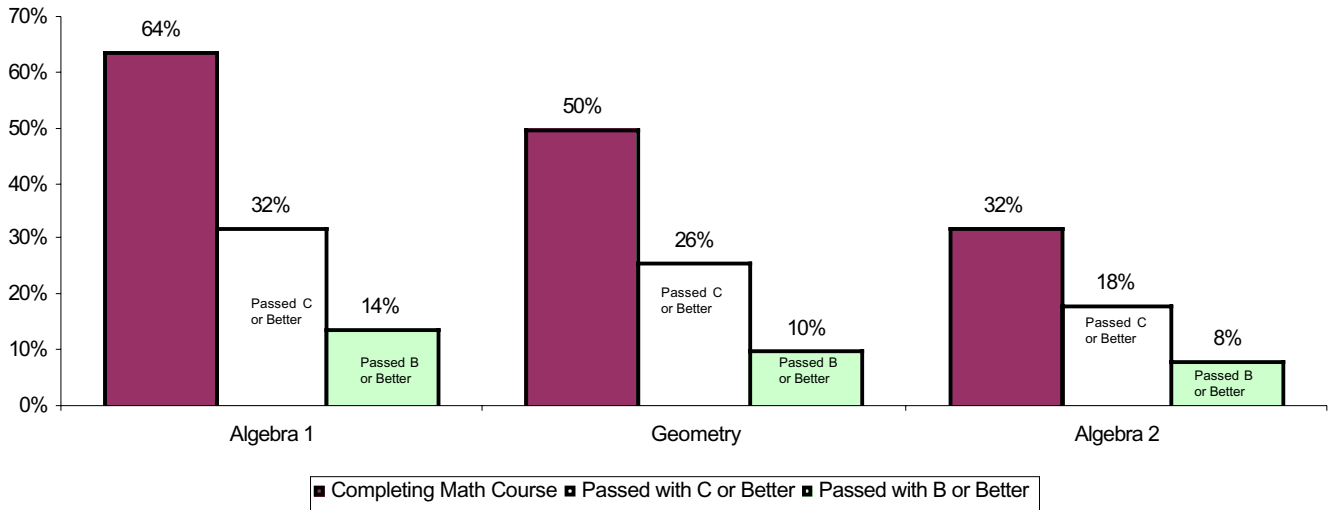


Figure B.2. UC Partnership schools: Proportion of students from the 1997/98 cohort completing and passing math courses, Grades 9-11.

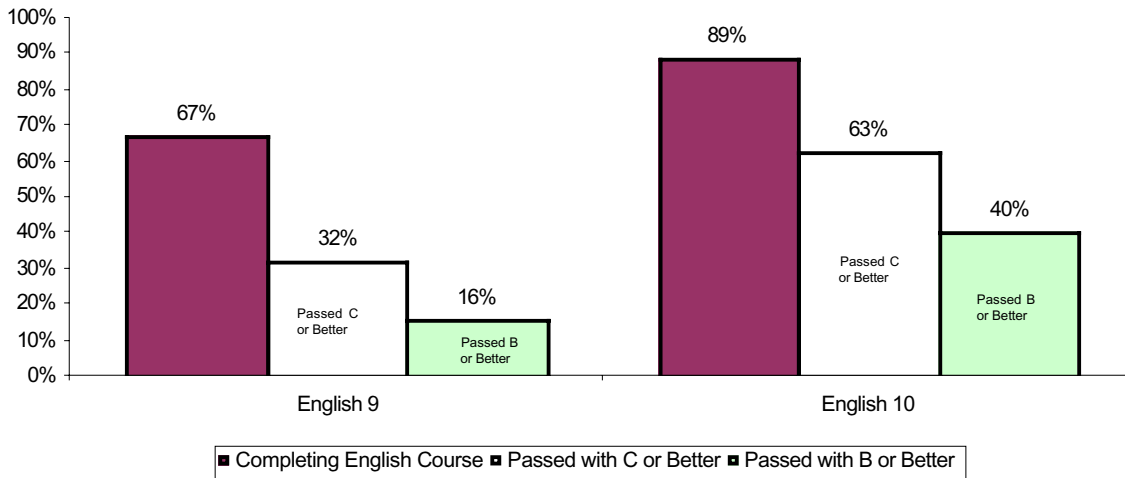


Figure B.3. UC Partnership schools: Proportion of students from the 1997/98 cohort completing and passing English courses, Grades 9 and 10.

Table B1.1  
English 9 by Spring 1997-98 for 9th-Grade 1997-98 Cohort Students in Partner School: Completion

		Taken 9th-grade English	Completed 9th-grade English	Passed with "C" or better 9th-grade English	Passed with "B" or better 9th-grade English
Those with incomplete data	% Passed	33%	33%	8%	2%
	# Passed	64	63	16	3
	Total <i>N</i>	193	193	193	193
Those who completed 2 semesters	% Passed	67%	67%	32%	16%
	# Passed	9,405	9,318	4,426	2,184
	Total <i>N</i>	13,960	13,960	13,960	13,960
Total	% Passed	67%	66%	31%	15%
	# Passed	9,469	9,381	4,442	2,187
	Total <i>N</i>	14,153	14,153	14,153	14,153

Table B1.2  
English 9 by Spring 1997-98 for 9th-Grade 1997-98 Cohort Students in Partner School: Ethnicity

		Taken 9th-grade English	Completed 9th-grade English	Passed with "C" or better 9th-grade English	Passed with "B" or better 9th-grade English
American Indian	% Passed	77%	73%	27%	13%
	# Passed	23	22	8	4
	Total <i>N</i>	30	30	30	30
Asian	% Passed	91%	91%	72%	53%
	# Passed	107	107	85	62
	Total <i>N</i>	118	118	118	118
African American	% Passed	68%	66%	25%	11%
	# Passed	2,107	2,063	783	331
	Total <i>N</i>	3,109	3,109	3,109	3,109
Hispanic	% Passed	67%	66%	33%	16%
	# Passed	6,980	6,938	3,432	1,706
	Total <i>N</i>	10,470	10,470	10,470	10,470
White	% Passed	80%	80%	50%	34%
	# Passed	155	155	97	66
	Total <i>N</i>	193	193	193	193
Filipino	% Passed	86%	86%	64%	41%
	# Passed	19	19	14	9
	Total <i>N</i>	22	22	22	22
Pacific Islander	% Passed	78%	78%	39%	33%
	# Passed	14	14	7	6
	Total <i>N</i>	18	18	18	18
Total	% Passed	67%	67%	32%	16%
	# Passed	9,405	9,318	4,426	2,184
	Total <i>N</i>	13,960	13,960	13,960	13,960

Table B1.3  
English 9 by Spring 1997-98 for 9th-Grade 1997-98 Cohort Students in Partner School: Gender

Gender		Taken 9th-grade English	Completed 9th-grade English	Passed with "C" or better 9th-grade English	Passed with "B" or better 9th-grade English
Female	% Passed	70%	69%	37%	20%
	# Passed	4,800	4,760	2,550	1,386
	Total N	6,880	6,880	6,880	6,880
Male	% Passed	65%	64%	26%	11%
	# Passed	4,605	4,558	1,876	798
	Total N	7,080	7,080	7,080	7,080
Total	% Passed	67%	67%	32%	16%
	# Passed	9,405	9,318	4,426	2,184
	Total N	13,960	13,960	13,960	13,960

Table B1.4  
English 9 by Spring 1997-98 for 9th-Grade 1997-98 Cohort Students in Partner School: LEP

LEP status		Taken 9th-grade English	Completed 9th-grade English	Passed with "C" or better 9th-grade English	Passed with "B" or better 9th-grade English
LEP	% Passed	52%	51%	19%	8%
	# Passed	2,721	2,703	1,011	437
	Total N	5,263	5,263	5,263	5,263
Non-LEP	% Passed	77%	76%	39%	20%
	# Passed	6,684	6,615	3,415	1,747
	Total N	8,697	8,697	8,697	8,697
Total	% Passed	67%	67%	32%	16%
	# Passed	9,405	9,318	4,426	2,184
	Total N	13,960	13,960	13,960	13,960

Table B1.5  
English 9 by Spring 1997-98 for 9th-Grade 1997-98 Cohort Students in Partner School: Free Lunch

Free/reduced lunch status		Taken 9th-grade English	Completed 9th-grade English	Passed with "C" or better 9th-grade English	Passed with "B" or better 9th-grade English
Non-free/ reduced lunch	% Passed	73%	72%	32%	15%
	# Passed	2,073	2,051	905	428
	Total N	2,854	2,854	2,854	2,854
Free/reduced lunch	% Passed	70%	70%	34%	17%
	# Passed	7,156	7,093	3,486	1,746
	Total N	10,171	10,171	10,171	10,171
Missing	% Passed	19%	19%	4%	1%
	# Passed	176	174	35	10
	Total N	935	935	935	935
Total	% Passed	67%	67%	32%	16%
	# Passed	9,405	9,318	4,426	2,184
	Total N	13,960	13,960	13,960	13,960



Table B2.1  
English 10 by Spring 1998-99 for 9th-Grade 1997-98 Cohort Students in Partner Schools: Completion

		Taken 10th-grade English	Completed 10th-grade English	Passed with "C" or better 10th-grade English	Passed with "B" or better 10th-grade English
Those with incomplete data	% Passed	30%	30%	13%	7%
	# Passed	1,367	1,344	579	301
	Total <i>N</i>	4,482	4,482	4,482	4,482
Those who completed 4 semesters	% Passed	89%	89%	63%	40%
	# Passed	8,574	8,563	6,120	3,840
	Total <i>N</i>	9,671	9,671	9,671	9,671
Total	% Passed	70%	70%	47%	29%
	# Passed	9,941	9,907	6,699	4,141
	Total <i>N</i>	14,153	14,153	14,153	14,153

Table B2.2  
English 10 by Spring 1998-99 for 9th-Grade 1997-98 Cohort Students in Partner Schools: Ethnicity

		Taken 10th-grade English	Completed 10th-grade English	Passed with "C" or better 10th-grade English	Passed with "B" or better 10th-grade English
American Indian	% Passed	79%	79%	58%	42%
	# Passed	15	15	11	8
	Total <i>N</i>	19	19	19	19
Asian	% Passed	97%	97%	94%	87%
	# Passed	95	95	92	85
	Total <i>N</i>	98	98	98	98
African American	% Passed	87%	87%	58%	33%
	# Passed	1,634	1,631	1,091	614
	Total <i>N</i>	1,870	1,870	1,870	1,870
Hispanic	% Passed	89%	89%	64%	40%
	# Passed	6,664	6,656	4,787	3,024
	Total <i>N</i>	7,513	7,513	7,513	7,513
White	% Passed	98%	98%	81%	63%
	# Passed	137	137	113	88
	Total <i>N</i>	140	140	140	140
Filipino	% Passed	89%	89%	83%	78%
	# Passed	16	16	15	14
	Total <i>N</i>	18	18	18	18
Pacific Islander	% Passed	100%	100%	85%	54%
	# Passed	13	13	11	7
	Total <i>N</i>	13	13	13	13
Total	% Passed	89%	89%	63%	40%
	# Passed	8,574	8,563	6,120	3,840
	Total <i>N</i>	9,671	9,671	9,671	9,671

Table B2.3  
English 10 by Spring 1998-99 for 9th-Grade 1997-98 Cohort Students in Partner Schools: Gender

Gender		Taken 10th-grade English	Completed 10th-grade English	Passed with "C" or better 10th-grade English	Passed with "B" or better 10th-grade English
Female	% Passed	90%	90%	69%	47%
	# Passed	4,372	4,366	3,356	2,284
	Total N	4,832	4,832	4,832	4,832
Male	% Passed	87%	87%	57%	32%
	# Passed	4,202	4,197	2,764	1,556
	Total N	4,839	4,839	4,839	4,839
Total	% Passed	89%	89%	63%	40%
	# Passed	8,574	8,563	6,120	3,840
	Total N	9,671	9,671	9,671	9,671

Table B2.4  
English 10 by Spring 1998-99 for 9th-Grade 1997-98 Cohort Students in Partner Schools: LEP

LEP status		Taken 10th-grade English	Completed 10th-grade English	Passed with "C" or better 10th-grade English	Passed with "B" or better 10th-grade English
LEP	% Passed	80%	79%	53%	30%
	# Passed	2,870	2,865	1,896	1,078
	Total N	3,605	3,605	3,605	3,605
Non-LEP	% Passed	94%	94%	70%	46%
	# Passed	5,704	5,698	4,224	2,762
	Total N	6,066	6,066	6,066	6,066
Total	% Passed	89%	89%	63%	40%
	# Passed	8,574	8,563	6,120	3,840
	Total N	9,671	9,671	9,671	9,671

Table B2.5  
English 10 by Spring 1998-99 for 9th-Grade 1997-98 Cohort Students in Partner Schools: Free Lunch

Free/reduced lunch status		Taken 10th-grade English	Completed 10th-grade English	Passed with "C" or better 10th-grade English	Passed with "B" or better 10th-grade English
Non-free/ reduced lunch	% Passed	92%	92%	63%	41%
	# Passed	1,722	1,721	1,192	762
	Total N	1,878	1,878	1,878	1,878
Free/reduced lunch	% Passed	89%	89%	64%	40%
	# Passed	6,587	6,578	4,766	2,983
	Total N	7,412	7,412	7,412	7,412
Missing	% Passed	70%	69%	43%	25%
	# Passed	265	264	162	95
	Total N	381	381	381	381
Total	% Passed	89%	89%	63%	40%
	# Passed	8,574	8,563	6,120	3,840
	Total N	9,671	9,671	9,671	9,671

Table B3.1

Algebra I/Integrated Math I by Spring 1997-98 for 9th-Grade 1997-98 Cohort Students in Partner Schools: Completion

		Taken Algebra I/ Int Math I by 9th grade	Completed Algebra I/ Int Math I by 9th grade	Passed with "C" or better Algebra I/ Int Math I by 9th grade	Passed with "B" or better Algebra I/ Int Math I by 9th grade
Those with incomplete data	% Passed	28%	27%	7%	3%
	# Passed	54	53	13	5
	Total <i>N</i>	193	193	193	193
Those who completed 2 semesters	% Passed	64%	64%	32%	14%
	# Passed	8,971	8,918	4,405	1,955
	Total <i>N</i>	13,960	13,960	13,960	13,960
Total	% Passed	64%	63%	31%	14%
	# Passed	9,025	8,971	4,418	1,960
	Total <i>N</i>	14,153	14,153	14,153	14,153

Table B3.2

Algebra I/Integrated Math I by Spring 1997-98 for 9th-Grade 1997-98 Cohort Students in Partner Schools: Ethnicity

		Taken Algebra I/ Int Math I by 9th grade	Completed Algebra I/ Int Math I by 9th grade	Passed with "C" or better Algebra I/ Int Math I by 9th grade	Passed with "B" or better Algebra I/ Int Math I by 9th grade
American Indian	% Passed	57%	57%	30%	20%
	# Passed	17	17	9	6
	Total <i>N</i>	30	30	30	30
Asian	% Passed	87%	87%	77%	55%
	# Passed	103	103	91	65
	Total <i>N</i>	118	118	118	118
African American	% Passed	60%	59%	26%	9%
	# Passed	1,875	1,845	798	292
	Total <i>N</i>	3,109	3,109	3,109	3,109
Hispanic	% Passed	65%	65%	32%	15%
	# Passed	6,817	6,795	3,398	1,531
	Total <i>N</i>	10,470	10,470	10,470	10,470
White	% Passed	66%	66%	46%	26%
	# Passed	128	127	88	51
	Total <i>N</i>	193	193	193	193
Filipino	% Passed	91%	91%	59%	23%
	# Passed	20	20	13	5
	Total <i>N</i>	22	22	22	22
Pacific Islander	% Passed	61%	61%	44%	28%
	# Passed	11	11	8	5
	Total <i>N</i>	18	18	18	18
Total	% Passed	64%	64%	32%	14%
	# Passed	8,971	8,918	4,405	1,955
	Total <i>N</i>	13,960	13,960	13,960	13,960

Table B3.3  
Algebra I/Integrated Math I by Spring 1997-98 for 9th-Grade 1997-98 Cohort Students in Partner  
Schools: Gender

Gender		Taken Algebra I/ Int Math I by 9th grade	Completed Algebra I/ Int Math I by 9th grade	Passed with "C" or better Algebra I/ Int Math I by 9th grade	Passed with "B" or better Algebra I/ Int Math I by 9th grade
Female	% Passed	66%	66%	35%	16%
	# Passed	4,565	4,540	2,441	1,130
	Total N	6,880	6,880	6,880	6,880
Male	% Passed	62%	62%	28%	12%
	# Passed	4,406	4,378	1,964	825
	Total N	7,080	7,080	7,080	7,080
Total	% Passed	64%	64%	32%	14%
	# Passed	8,971	8,918	4,405	1,955
	Total N	13,960	13,960	13,960	13,960

Table B3.4  
Algebra I/Integrated Math I by Spring 1997-98 for 9th-Grade 1997-98 Cohort Students in Partner  
Schools: LEP

LEP status		Taken Algebra I/ Int Math I by 9th grade	Completed Algebra I/ Int Math I by 9th grade	Passed with "C" or better Algebra I/ Int Math I by 9th grade	Passed with "B" or better Algebra I/ Int Math I by 9th grade
LEP	% Passed	60%	60%	25%	11%
	# Passed	3,147	3,132	1,320	560
	Total N	5,263	5,263	5,263	5,263
Non-LEP	% Passed	67%	67%	35%	16%
	# Passed	5,824	5,786	3,085	1,395
	Total N	8,697	8,697	8,697	8,697
Total	% Passed	64%	64%	32%	14%
	# Passed	8,971	8,918	4,405	1,955
	Total N	13,960	13,960	13,960	13,960

Table B3.5  
 Algebra I/Integrated Math I by Spring 1997-98 for 9th-Grade 1997-98 Cohort Students in Partner  
 Schools: Free Lunch

Free/reduced lunch status		Taken Algebra I/ Int Math I by 9th grade	Completed Algebra I/ Int Math I by 9th grade	Passed with "C" or better Algebra I/ Int Math I by 9th grade	Passed with "B" or better Algebra I/ Int Math I by 9th grade
Non-free/ reduced lunch	% Passed	61%	61%	30%	13%
	# Passed	1,744	1,734	857	363
	Total <i>N</i>	2,854	2,854	2,854	2,854
Free/reduced lunch	% Passed	68%	68%	34%	15%
	# Passed	6,920	6,883	3,432	1,549
	Total <i>N</i>	10,171	10,171	10,171	10,171
Missing	% Passed	33%	32%	12%	5%
	# Passed	307	301	116	43
	Total <i>N</i>	935	935	935	935
Total	% Passed	64%	64%	32%	14%
	# Passed	8,971	8,918	4,405	1,955
	Total <i>N</i>	13,960	13,960	13,960	13,960

Table B4.1  
 Geometry/Integrated Math II by Spring 1998-99 for 9th-Grade 1997-98 Cohort Students in Partner  
 Schools: Completion

		Taken Geometry & Int Math II by 10th grade	Completed Geometry & Int Math II by 10th grade	Passed with "C" or better Geometry & Int Math II by 10th grade	Passed with "B" or better Geometry & Int Math II by 10th grade
Those with incomplete data	% Passed	7%	7%	3%	1%
	# Passed	321	319	129	56
	Total N	4,482	4,482	4,482	4,482
Those who completed 4 semesters	% Passed	50%	50%	26%	10%
	# Passed	4,853	4,837	2,532	1,004
	Total N	9,671	9,671	9,671	9,671
Total	% Passed	37%	36%	19%	7%
	# Passed	5,174	5,156	2,661	1,060
	Total N	14,153	14,153	14,153	14,153

Table B4.2  
 Geometry/Integrated Math II by Spring 1998-99 for 9th-Grade 1997-98 Cohort Students in Partner  
 Schools: Ethnicity

		Taken Geometry & Int Math II by 10th grade	Completed Geometry & Int Math II by 10th grade	Passed with "C" or better Geometry & Int Math II by 10th grade	Passed with "B" or better Geometry & Int Math II by 10th grade
American Indian	% Passed	32%	32%	26%	11%
	# Passed	6	6	5	2
	Total N	19	19	19	19
Asian	% Passed	83%	83%	70%	46%
	# Passed	81	81	69	45
	Total N	98	98	98	98
African American	% Passed	45%	45%	19%	6%
	# Passed	844	838	359	104
	Total N	1,870	1,870	1,870	1,870
Hispanic	% Passed	51%	51%	27%	11%
	# Passed	3,807	3,797	2,011	809
	Total N	7,513	7,513	7,513	7,513
White	% Passed	66%	66%	51%	29%
	# Passed	93	93	71	40
	Total N	140	140	140	140
Filipino	% Passed	83%	83%	67%	17%
	# Passed	15	15	12	3
	Total N	18	18	18	18
Pacific Islander	% Passed	54%	54%	38%	8%
	# Passed	7	7	5	1
	Total N	13	13	13	13
Total	% Passed	50%	50%	26%	10%
	# Passed	4,853	4,837	2,532	1,004
	Total N	9,671	9,671	9,671	9,671

Table B4.3  
 Geometry/Integrated Math II by Spring 1998-99 for 9th-Grade 1997-98 Cohort Students in Partner  
 Schools: Gender

Gender		Taken Geometry & Int Math II by 10th grade	Completed Geometry & Int Math II by 10th grade	Passed with "C" or better Geometry & Int Math II by 10th grade	Passed with "B" or better Geometry & Int Math II by 10th grade
Female	% Passed	54%	53%	29%	12%
	# Passed	2,589	2,580	1,401	589
	Total N	4,832	4,832	4,832	4,832
Male	% Passed	47%	47%	23%	9%
	# Passed	2,264	2,257	1,131	415
	Total N	4,839	4,839	4,839	4,839
Total	% Passed	50%	50%	26%	10%
	# Passed	4,853	4,837	2,532	1,004
	Total N	9,671	9,671	9,671	9,671

Table B4.4  
 Geometry/Integrated Math II by Spring 1998-99 for 9th-Grade 1997-98 Cohort Students in Partner  
 Schools: LEP

LEP status		Taken Geometry & Int Math II by 10th grade	Completed Geometry & Int Math II by 10th grade	Passed with "C" or better Geometry & Int Math II by 10th grade	Passed with "B" or better Geometry & Int Math II by 10th grade
LEP	% Passed	43%	43%	20%	8%
	# Passed	1,567	1,562	730	275
	Total N	3,605	3,605	3,605	3,605
Non-LEP	% Passed	54%	54%	30%	12%
	# Passed	3,286	3,275	1,802	729
	Total N	6,066	6,066	6,066	6,066
Total	% Passed	50%	50%	26%	10%
	# Passed	4,853	4,837	2,532	1,004
	Total N	9,671	9,671	9,671	9,671

Table B4.5  
 Geometry/Integrated Math II by Spring 1998-99 for 9th-Grade 1997-98 Cohort Students in Partner  
 Schools: Free Lunch

Free/reduced lunch status		Taken Geometry & Int Math II by 10th grade	Completed Geometry & Int Math II by 10th grade	Passed with "C" or better Geometry & Int Math II by 10th grade	Passed with "B" or better Geometry & Int Math II by 10th grade
Non-free/ reduced lunch	% Passed	47%	46%	25%	10%
	# Passed	877	873	464	182
	Total <i>N</i>	1,878	1,878	1,878	1,878
Free/reduced lunch	% Passed	52%	52%	27%	11%
	# Passed	3,850	3,838	2,005	800
	Total <i>N</i>	7,412	7,412	7,412	7,412
Missing	% Passed	33%	33%	17%	6%
	# Passed	126	126	63	22
	Total <i>N</i>	381	381	381	381
Total	% Passed	50%	50%	26%	10%
	# Passed	4,853	4,837	2,532	1,004
	Total <i>N</i>	9,671	9,671	9,671	9,671



Table B5.1  
Algebra II/Integrated Math III by Spring 1999-2000 for 9th-Grade 1997-98 Cohort Students in Partner Schools: Completion

		Taken Algebra II/ Int Math III by 11th grade	Completed Algebra II/Int Math III by 11th grade	Passed with "C" or better Algebra II/Int Math III by 11th grade	Passed with "B" or better Algebra II/Int Math III by 11th grade
Those with incomplete data	% Passed	3%	3%	1%	1%
	# Passed	185	182	84	42
	Total N	6,440	6,440	6,440	6,440
Those who completed 6 semesters	% Passed	33%	32%	18%	8%
	# Passed	2,512	2,502	1,398	621
	Total N	7,713	7,713	7,713	7,713
Total	% Passed	19%	19%	10%	5%
	# Passed	2,697	2,684	1,482	663
	Total N	14,153	14,153	14,153	14,153

Table B5.2  
Algebra II/Integrated Math III by Spring 1999-2000 for 9th-Grade 1997-98 Cohort Students in Partner Schools: Ethnicity

		Taken Algebra II/ Int Math III by 11th grade	Completed Algebra II/Int Math III by 11th grade	Passed with "C" or better Algebra II/Int Math III by 11th grade	Passed with "B" or better Algebra II/Int Math III by 11th grade
American Indian	% Passed	24%	24%	18%	12%
	# Passed	4	4	3	2
	Total N	17	17	17	17
Asian	% Passed	87%	86%	74%	38%
	# Passed	81	80	69	35
	Total N	93	93	93	93
African American	% Passed	32%	32%	17%	5%
	# Passed	446	444	229	76
	Total N	1,386	1,386	1,386	1,386
Hispanic	% Passed	31%	31%	17%	8%
	# Passed	1,893	1,887	1,016	467
	Total N	6,069	6,069	6,069	6,069
White	% Passed	59%	58%	55%	28%
	# Passed	71	70	66	34
	Total N	120	120	120	120
Filipino	% Passed	67%	67%	60%	20%
	# Passed	10	10	9	3
	Total N	15	15	15	15
Pacific Islander	% Passed	54%	54%	46%	31%
	# Passed	7	7	6	4
	Total N	13	13	13	13
Total	% Passed	33%	32%	18%	8%
	# Passed	2,512	2,502	1,398	621
	Total N	7,713	7,713	7,713	7,713

Table B5.3  
Algebra II/Integrated Math III by Spring 1999-2000 for 9th-Grade 1997-98 Cohort Students in Partner Schools: Gender

Gender		Taken Algebra II/ Int Math III by 11th grade	Completed Algebra II/Int Math III by 11th grade	Passed with "C" or better Algebra II/Int Math III by 11th grade	Passed with "B" or better Algebra II/Int Math III by 11th grade
Female	% Passed	35%	35%	21%	10%
	# Passed	1,375	1,369	809	378
	Total N	3,907	3,907	3,907	3,907
Male	% Passed	30%	30%	15%	6%
	# Passed	1,137	1,133	589	243
	Total N	3,806	3,806	3,806	3,806
Total	% Passed	33%	32%	18%	8%
	# Passed	2,512	2,502	1,398	621
	Total N	7,713	7,713	7,713	7,713

Table B5.4  
Algebra II/Integrated Math III by Spring 1999-2000 for 9th-Grade 1997-98 Cohort Students in Partner Schools: LEP

LEP status		Taken Algebra II/ Int Math III by 11th grade	Completed Algebra II/Int Math III by 11th grade	Passed with "C" or better Algebra II/Int Math III by 11th grade	Passed with "B" or better Algebra II/Int Math III by 11th grade
LEP	% Passed	21%	21%	10%	5%
	# Passed	581	580	268	127
	Total N	2,767	2,767	2,767	2,767
Non-LEP	% Passed	39%	39%	23%	10%
	# Passed	1,931	1,922	1,130	494
	Total N	4,946	4,946	4,946	4,946
Total	% Passed	33%	32%	18%	8%
	# Passed	2,512	2,502	1,398	621
	Total N	7,713	7,713	7,713	7,713

Table B5.5  
 Algebra II/Integrated Math III by Spring 1999-2000 for 9th-Grade 1997-98 Cohort Students in Partner  
 Schools: Free Lunch

Free/reduced lunch status		Taken Algebra II/ Int Math III by 11th grade	Completed Algebra II/ Int Math III by 11th grade	Passed with "C" or better Algebra II/ Int Math III by 11th grade	Passed with "B" or better Algebra II/ Int Math III by 11th grade
Non-free/ reduced lunch	% Passed	35%	34%	21%	8%
	# Passed	506	501	302	120
	Total <i>N</i>	1,458	1,458	1,458	1,458
Free/reduced lunch	% Passed	33%	33%	18%	8%
	# Passed	1,962	1,957	1,076	494
	Total <i>N</i>	6,017	6,017	6,017	6,017
Missing	% Passed	18%	18%	8%	3%
	# Passed	44	44	20	7
	Total <i>N</i>	238	238	238	238
Total	% Passed	33%	32%	18%	8%
	# Passed	2,512	2,502	1,398	621
	Total <i>N</i>	7,713	7,713	7,713	7,713

Table B6.1  
Chemistry by Spring 1999-2000 for 9th-Grade 1997-98 Cohort Students in Partner Schools: Completion

		Taken Chemistry by 11th grade	Completed Chemistry by 11th grade	Passed with "C" or better Chemistry by 11th grade	Passed with "B" or better Chemistry by 11th grade
Those with incomplete data	% Passed	3%	3%	2%	1%
	# Passed	210	209	113	49
	Total <i>N</i>	6,440	6,440	6,440	6,440
Those who completed 6 semesters	% Passed	40%	40%	22%	10%
	# Passed	3,113	3,107	1,735	793
	Total <i>N</i>	7,713	7,713	7,713	7,713
Total	% Passed	23%	23%	13%	6%
	# Passed	3,323	3,316	1,848	842
	Total <i>N</i>	14,153	14,153	14,153	14,153

Table B6.2  
Chemistry by Spring 1999-2000 for 9th-Grade 1997-98 Cohort Students in Partner Schools: Ethnicity

		Taken Chemistry by 11th grade	Completed Chemistry by 11th grade	Passed with "C" or better Chemistry by 11th grade	Passed with "B" or better Chemistry by 11th grade
American Indian	% Passed	24%	24%	12%	6%
	# Passed	4	4	2	1
	Total <i>N</i>	17	17	17	17
Asian	% Passed	74%	74%	63%	39%
	# Passed	69	69	59	36
	Total <i>N</i>	93	93	93	93
African American	% Passed	47%	47%	25%	10%
	# Passed	656	653	353	136
	Total <i>N</i>	1,386	1,386	1,386	1,386
Hispanic	% Passed	38%	38%	21%	10%
	# Passed	2,307	2,304	1,260	579
	Total <i>N</i>	6,069	6,069	6,069	6,069
White	% Passed	53%	53%	41%	28%
	# Passed	63	63	49	33
	Total <i>N</i>	120	120	120	120
Filipino	% Passed	47%	47%	40%	27%
	# Passed	7	7	6	4
	Total <i>N</i>	15	15	15	15
Pacific Islander	% Passed	54%	54%	46%	31%
	# Passed	7	7	6	4
	Total <i>N</i>	13	13	13	13
Total	% Passed	40%	40%	22%	10%
	# Passed	3,113	3,107	1,735	793
	Total <i>N</i>	7,713	7,713	7,713	7,713

Table B6.3  
Chemistry by Spring 1999-2000 for 9th-Grade 1997-98 Cohort Students in Partner Schools: Gender

Gender		Taken Chemistry by 11th grade	Completed Chemistry by 11th grade	Passed with "C" or better Chemistry by 11th grade	Passed with "B" or better Chemistry by 11th grade
Female	% Passed	44%	44%	26%	13%
	# Passed	1,719	1,714	1,000	493
	Total N	3,907	3,907	3,907	3,907
Male	% Passed	37%	37%	19%	8%
	# Passed	1,394	1,393	735	300
	Total N	3,806	3,806	3,806	3,806
Total	% Passed	40%	40%	22%	10%
	# Passed	3,113	3,107	1,735	793
	Total N	7,713	7,713	7,713	7,713

Table B6.4  
Chemistry by Spring 1999-2000 for 9th-Grade 1997-98 Cohort Students in Partner Schools: LEP

LEP status		Taken Chemistry by 11th grade	Completed Chemistry by 11th grade	Passed with "C" or better Chemistry by 11th grade	Passed with "B" or better Chemistry by 11th grade
LEP	% Passed	29%	29%	14%	6%
	# Passed	797	795	388	159
	Total N	2,767	2,767	2,767	2,767
Non-LEP	% Passed	47%	47%	27%	13%
	# Passed	2,316	2,312	1,347	634
	Total N	4,946	4,946	4,946	4,946
Total	% Passed	40%	40%	22%	10%
	# Passed	3,113	3,107	1,735	793
	Total N	7,713	7,713	7,713	7,713

Table B6.5  
 Chemistry by Spring 1999-2000 for 9th-Grade 1997-98 Cohort Students in Partner Schools: Free Lunch

Free/reduced lunch status		Taken Chemistry by 11th grade	Completed Chemistry by 11th grade	Passed with "C" or better Chemistry by 11th grade	Passed with "B" or better Chemistry by 11th grade
Non-free/ reduced lunch	% Passed	41%	41%	23%	11%
	# Passed	594	593	337	154
	Total <i>N</i>	1,458	1,458	1,458	1,458
Free/reduced lunch	% Passed	41%	41%	23%	10%
	# Passed	2,457	2,452	1,369	625
	Total <i>N</i>	6,017	6,017	6,017	6,017
Missing	% Passed	26%	26%	12%	6%
	# Passed	62	62	29	14
	Total <i>N</i>	238	238	238	238
Total	% Passed	40%	40%	22%	10%
	# Passed	3,113	3,107	1,735	793
	Total <i>N</i>	7,713	7,713	7,713	7,713