

Using Better Information to Help Reduce Inequality in College Access

Preliminary Results of a Pilot Project¹

August 2009

Juan Sanchez, UC Office of the President

Gail Kaufman, Claudia Morales, and Miya Hayes Melish
Center for Educational Partnerships, UC Berkeley

Patricia Clark, Charles Dayton, David Stern, and Susan Tidyman
Career Academy Support Network
Graduate School of Education, UC Berkeley²

Central Questions: Do high school students have access to courses necessary for entrance to the California State University or University of California? Do high schools have accurate information about whether students are taking and successfully completing those courses—known as the a-g requirements—as they progress through high school? Can counselors and staff determine whether their school offers too few sections of particular a-g classes? Do policy makers have accurate information to design policies to encourage more students to fulfill the a-g requirements?

¹ This project was made possible by a grant from the James Irvine Foundation. The authors wish to thank Anne Stanton and Rogéair Purnell for their support and guidance.

² Susan Parker, of Clear Thinking Communications, provided expert editorial assistance.

Why This Matters: California public universities require high school students to complete a set of 15 courses in high school—the a-g courses—in order to be admitted. If high school students do not have access to the required courses in high school they will not be able to attend a California public university. If high schools and school districts are unaware of any gaps in access to the required classes, they cannot take steps to add more classes to fill those gaps. Student access to such classes directly determines their eligibility to attend a California public university.

Key Findings: A pilot test of the Transcript Evaluation Service—which electronically examines the transcripts of an entire high school’s student body and determines whether each student is on track to meet the a-g requirements—indicates that it can dramatically improve the breadth and precision of information available to high schools about a-g course-taking.

Data from the pilot test showed increases in the proportion of students, especially in grades 9 and 10, who were on pace to meet course requirements for California public universities.

These results suggest that the Transcript Evaluation Service can be useful as part of an effort to increase access to California higher education and also as a tool for evaluating such efforts.

Key Recommendations: The Transcript Evaluation Service should be made available to far more schools and students in California. While it played a valuable role in this project, it exists at only 80 high schools out of approximately 2,000 high schools in California.

Introduction

Public policy makers are increasingly committed to the idea that college should be an option for all high school students. California universities, which account for about two-thirds of

enrollment in bachelor's degree programs in California,³ have well-publicized academic requirements for admission.

College is not an option for all California high school graduates because there is often a lack of opportunity to complete 15 specific courses that are required by the University of California (UC) and California State University (CSU), known as the "a-g" courses (see **Box** below).

In 2003, only 33.5 percent of graduating seniors fulfilled all of the a-g requirements, according to a study by the California Postsecondary Education Commission.⁴ The percentages are even worse for underrepresented minorities. For example, just 24 percent of African Americans and 21 percent of Latinos completed the a-g requirements, the study found. If students do not complete the basic requirements in high school for admission to California universities, they are shut out of one of their main options for attending college.

The 15 "a-g" Courses Required by the University of California and California State University

- a. History/Social Sciences (2 years)
- b. English (4 years)
- c. Mathematics (3 years, UC recommends 4)
- d. Science (Lab) (2 years, UC recommends 3)
- e. Language Other than English (2 years, UC recommends 3)
- f. Visual/Performing Arts (1 year)
- g. College Prep Elective (1 year)

³ U.S. Department of Education, *Digest of Education Statistics*, 2004, Table 201.

⁴ California Postsecondary Education Commission (March 2005). *University Preparedness of Public High School Graduates*.

<http://www.cpec.ca.gov/completereports/2005reports/05-05.pdf>

A primary reason why so many students are not completing these required courses is that not enough sections of the courses are available at their high schools. Less than half of California schools offer enough sections of a-g courses to allow all students to meet the a-g requirements, according to a 2007 study.⁵ The shortage of a-g classes is worse in schools that enroll more low-income students and students of color. More than two-thirds of high schools with a majority of minority students do not offer enough of these classes, the study found.

This lack of access to required courses may be one factor that affects a growing disparity in those who attend college in California. The proportion of California public high school graduates who are Latino, African American or American Indian has grown to about 46 percent. But these underrepresented racial and ethnic groups now account for only about 20 percent of the enrolled freshman class at the University of California system in 2006,⁶ and the gap between their numbers in high school and college has been gradually widening for 20 years.

A relatively new service, called the Transcript Evaluation Service, now makes it much easier for counselors, students and parents learn whether each student is on track to meet the a-g requirements. Schools can use this information to alter students' schedules if they are not on track, thus increasing their chances of qualifying for and attending one of California's public universities. The information provided by the Transcript Evaluation Service also enables schools to determine whether too few a-g classes are being offered in particular subjects, so that they can make more classes available in these subjects. And

⁵ *California Educational Opportunity Report 2007.*

<http://www.idea.gseis.ucla.edu/publications/eor07/state/pdf/StateEOR2007.pdf>

⁶ University of California Undergraduate Work Team of the Study Group on University Diversity: *Recommendations and Observations*, September 2007.

the service provides more accurate information for framing state policy regarding college access.

A pilot test of the Transcript Evaluation Service indicates that it is a promising tool that can dramatically expand the breadth and precision of information available to high schools.

Why the Transcript Evaluation Service is Needed

It may seem odd that schools and counselors would need a service to electronically examine their transcripts to see if students are on track to meet the a-g requirements. Why can't counselors and schools simply look at the transcripts and see for themselves? The answer is that analyzing these transcripts is not as simple as it seems.

High school counselors. Typical caseloads for counselors are 500 or 600 students. Often counselors must focus on addressing immediate crises in the students' lives, especially in low-performing schools. It is normally impossible for counselors to review every student's transcripts every year to determine whether the student is on pace to meet the a-g course requirements and to discuss that with each student.

When counselors do analyze students' transcripts, it is often difficult and time-consuming to determine how well a student is progressing toward meeting the a-g requirements. The counselors must match the courses on a student's transcript to a list of approved a-g courses on the "Doorways" web site of the University of California (see **box** below). In schools that have recently added new a-g offerings, counselors must check that particular courses were approved for a-g credit during the academic school year the student actually took the course. (For instance, in one school a graduating senior was denied admission to a California State University campus because a particular class she successfully completed as a ninth grader was not an approved a-g course at the time she took the class.)

Another difficult challenge is analyzing transcripts for students who have transferred from other high schools, which is often the case, especially in low-performing schools. Students may have attended several high schools and counselors would have to check the courses at the student's previous high schools against the Doorways lists for the years students attended those schools, to learn whether those students are on track to complete their requirements. Counselors usually do not have time to do this analysis for all students every year. The Transcript Evaluation service automatically calls up the relevant Doorways lists and checks all courses on the student's transcript against the appropriate list.

Doorways List

In order for any course on a student's transcript to count toward meeting one of the a-g requirements, that course must appear on a list of courses that have been approved by the UC Office of the President. Each high school's list of approved courses is posted on a Web site called "Doorways."

To get courses approved for the a-g list, high schools must submit a detailed course description to the UC Office of the President. The course description must follow a prescribed format and include the following elements: a course outline; descriptions of all reading, writing, and laboratory assignments; information regarding textbooks and other instructional resources; and teaching and assessment procedures. UC Office of the President staff and faculty members review the course descriptions to determine whether they qualify. Each subject area has guidelines for approval of courses. Sometimes reviewers will ask for additional information. This is a potentially time-consuming process for high schools, especially for those whose staff are already stretched thin.

Each year, the UC Office of the President asks high schools to update their list of courses to appear on Doorways. Usually a designated administrator or counselor at the school is responsible for reviewing and updating the a-g list. Sometimes the updating of the a-g list is done at the district level. Not all schools update the list, which means that newly added courses that could potentially count toward meeting the a-g requirement will not in fact be counted because they are not on the official Doorways list.

In addition, sometimes schools will change the name of a course that has already been approved for the a-g requirements but fail to update it to the Doorways list so students will no longer receive credit for that course as meeting the a-g requirements. (For instance, one high school had a Fine Arts course that counted toward the a-g requirement. The school changed the name to Art and did not submit an update to Doorways; as a result, students taking that course no longer received a-g credit for it.)

For more information on the Doorways list, see www.ucop.edu/doorways.

Students and parents. Many students and their parents mistakenly believe that completing requirements for a high school diploma is the same as meeting requirements for college admission. As a result, students may think they are on track to complete college requirements when in fact they are not. Students may be taking a full load of classes but may not be taking the correct classes to qualify them for admission to one of California's public universities. Because counselors have limited time with students and the transcripts do not clearly show which courses are missing, students and parents may not know until it's too late that they need to add more classes to meet the requirements.

High schools and school districts. Because most high schools cannot review all students' transcripts every year, they lack sufficient information about whether they are offering enough sections of a-g courses. Since they do not have enough information to identify shortages of a-g classes, schools cannot take corrective action.

Local and state policy makers. The main existing source of information on how many graduating seniors have completed the a-g sequence is the California Basic Education Data System (CBEDS), which relies on self-reports by schools to the California Department of Education. These self-reports are usually based on estimates by school staff because compiling accurate data for all students would be far too time-consuming.

A 2005 study found evidence that the guesses reported to CBEDS are often inaccurate. The UC Office of the President used the Transcript Evaluation Service to examine the a-g completion rates of graduates from 60 high schools that had relatively low college-going rates. In 49 of the 60 schools, the a-g completion rate was lower than what they reported to CBEDS. In other

words, the officially reported a-g completion rates for these schools were higher than the actual completion rates.⁷

How the Transcript Evaluation Service Works

The Transcript Evaluation Service uses computer software to analyze high school transcripts.

An early prototype of the service enabled the UC Office of the President to evaluate thousands of transcripts of high school juniors for meeting a-g eligibility in one month, while a similar process a few years earlier had taken about seven months to evaluate by hand.

The process worked so well that in 2005, the UC Office of the President sponsored an initial effort to work with selected high schools across the state to use the Transcript Evaluation Service to evaluate the transcripts of 9-12th grade high school students. As of 2009, about 100 schools have participated.

High schools that wish to participate apply to the UC Office of the President. Up to now, there has been no cost to the schools. The number of schools that can participate each year depends on the UC budget. Typically, about 30-35 schools use the service annually at an average cost of about \$6,000 per school. In order to participate, schools must have computer software that can communicate with the University of California's system. Participating high schools receive training on how to electronically transmit their data to UC for a computer analysis. They must also agree to carry out an intervention based on the data from the Transcript Evaluation Service to make changes in the schools to help students better meet the a-g requirements. Schools typically work in conjunction with academic preparation

⁷ University of California Undergraduate Work Team of the Study Group on University Diversity: *Recommendations and Observations*, September 2007, Figure 5.

programs such as the Early Academic Outreach Program⁸ or MESA⁹ to plan those changes.

To learn more about the application procedure go here:

<https://www.transcriptevaluationservice.com/participate.htm>

The Transcript Evaluation Service allows the transcripts of an entire high school's student body to be electronically examined with respect to meeting the UC/CSU a-g course entrance and minimum GPA requirements (for the UC schools, the GPA requirement is 3.0 and for CSU schools the requirement is 2.0).

The transcripts are electronically checked by a computer to see which of a student's courses meet the a-g course requirements as shown on the Doorways web site. For students whose transcripts include coursework in more than one high school, the evaluation service automatically calls up the Doorways list for the correct year for each school attended. Once the electronic evaluation is done, human evaluators review a sample of the transcripts to ensure accuracy.

The UC Office of the President then posts the results to a password-protected web site that is accessible only to school staff who have been designated by the principal. School staff can examine reports for individual students, students grouped by grade level or other characteristics, and the school as a whole. Schools can also download the data to conduct additional analysis.

High schools typically receive reports once a year.

- **An individual student report.** These reports can be distributed to each student. They show the student's progress toward meeting each of the a-g course requirements and whether the GPA is above the minimum for UC or CSU eligibility or for a Cal Grant. The student

⁸ See <http://www.eaop.org/>

⁹ See <http://mesa.ucop.edu/home.html>

reports include easy-to-read charts so that counselors, students and parents can see at a glance the student's progress toward meeting requirements and which courses the student still must take. The reports also include information about financial aid and steps students can take to strengthen their academic performance and plan for future courses. Go here for a sample report:

https://www.transcriptevaluationservice.com/downloads/ES_IndividualStudentReportGrade10_sample.pdf

- **Student Roster Report.** The student roster report lists all students by grade level, the courses completed successfully, and courses still needed to fulfill a college preparatory course pattern.
- **School Summary Report.** The school summary report is designed for school administrators, counselors and teachers. This report provides "at-a-glance" references on how students in the school are progressing towards the 15 a-g course requirements. It shows the number of students at each grade level who are meeting a-g benchmarks, are close to meeting a-g benchmarks, and who are not meeting a-g benchmarks. The Transcript Evaluation Service can quickly show which of the a-g requirements are posing the biggest challenge at each high school by computing the percentage of students who satisfy the requirement in each subject area. School leaders can then focus their efforts on developing additional sections or courses in those particular subjects.

The Pilot Study

From January 2005 to June 2007, a grant from the James Irvine Foundation enabled the UC Office of the President, the Center for Educational Partnerships at UC Berkeley, and the Career Academy Support Network at UC Berkeley to test a strategy to increase the numbers of students meeting requirements for UC

or CSU. The aim of the project was to build a culture that encouraged students to prepare for and attend college. The Transcript Evaluation Service was one tool that researchers used to encourage a “college-going culture.”

The Three Organizations that Collaborated on this Project

- The Career Academy Support Network, UC Berkeley, led efforts to strengthen the functioning of small learning communities and career academies in the pilot high schools. An increasing number of low-performing schools have divided into small learning communities. One purpose of these small learning communities is to strengthen the relationships between teachers and students and to enable teachers to give each student more effective counseling and information about higher education.
- The Center for Educational Partnerships, UC Berkeley, led efforts to develop college-going cultures in the pilot high schools. A college-going culture refers to the environment, attitudes, and practices in schools and communities that encourage students and their families to obtain the information, tools, and perspective to enhance access to and success in post-secondary education
- The UC Office of the President led efforts to conduct transcript analysis in the pilot high schools using the electronic Transcript Evaluation Service.

Researchers chose six California high schools for the pilot program. These six high schools fell below average on the state’s Academic Performance Index and enrolled large proportions of students from groups that are under-represented in higher education. At the start of this project in 2004-2005 just four percent of graduates went to UC schools compared with more than seven percent statewide; nine percent of the graduates went to CSU schools compared with 11 percent statewide.

A baseline analysis of 2006 graduates from the six schools found that 63 percent did *not* meet the a-g requirements, 21 percent were close (meaning they were within one or two a-g courses of meeting the requirements) and only 16 percent met the requirements. Across the six schools, the number of 2006 graduates who had completed the a-g sequence ranged from 7 to 19 percent. Researchers believe the low rate of a-g course completion was likely due to the factors mentioned earlier:

- Difficulty getting into a-g classes because too few sections of these classes were offered.
- Lack of knowledge of the a-g requirements by students and of where they stood in relationship to the requirements.

To address these issues, the pilot project employed a combination of three strategies:

- Employing the Transcript Evaluation Service to assess students' progress toward meeting requirements for UC and CSU, and identifying a-g subjects in which courses are in short supply.
- Providing a professional development initiative to build and strengthen the college-going culture at the high school, including increasing awareness of a-g and testing requirements for UC and CSU among teachers and other staff.
- Working with teams of teachers involved in career academies and other small learning communities to implement both of these above strategies and to provide students information about requirements for college entry, especially the a-g requirements.

Specific activities related to improving a-g course information and access included:

- Holding workshops for teachers and counselors about a-g in relationship to their department and courses. These workshops, along with surveys of teachers, revealed how few staff knew which courses met a-g requirements.

- Providing Transcript Evaluation Service reports. Some of these showed as many as 30 percent of students were within one or two courses of being on track to meet a-g benchmarks. These school-wide reports also showed which courses most students were failing to take, highlighting the areas where schools might add more courses or sections.
- Providing posters for each classroom that showed the 15 a-g course requirements and which courses at the high school satisfied these requirements.
- Counseling students over the summer regarding their progress in meeting a-g requirements to allow course changes in the fall schedule.
- Arranging for students to receive reports from the UC Transcript Evaluation Service showing their individual progress toward meeting a-g requirements.
- Helping schools add more sections of a-g courses.

Pilot Project Activities to Build a College-Going Culture

In addition to the efforts to improve a-g course information and access, researchers undertook several activities to build a college-going culture at the participating high schools. Among the activities, they:

- Placed laminated posters around the high school with names and pictures of the teachers and the colleges they attended.
- Placed maps showing where past graduates of the high school had attended college.
- Scheduled all tenth and eleventh graders to take the PSAT.
- Assigned one day per week for college attire (for students and staff)
- Matched nearby college students to be mentors for the high school students.
- Organized a “Parent University” which met in the evening, once a week for 10 weeks, to inform families about college requirements and financial aid.
- Had a series of meetings and workshops with teams of teachers and counselors at each high school to review the elements of college-going culture and to develop and implement action plans both for the school as a whole and for small learning communities within the school.

Results

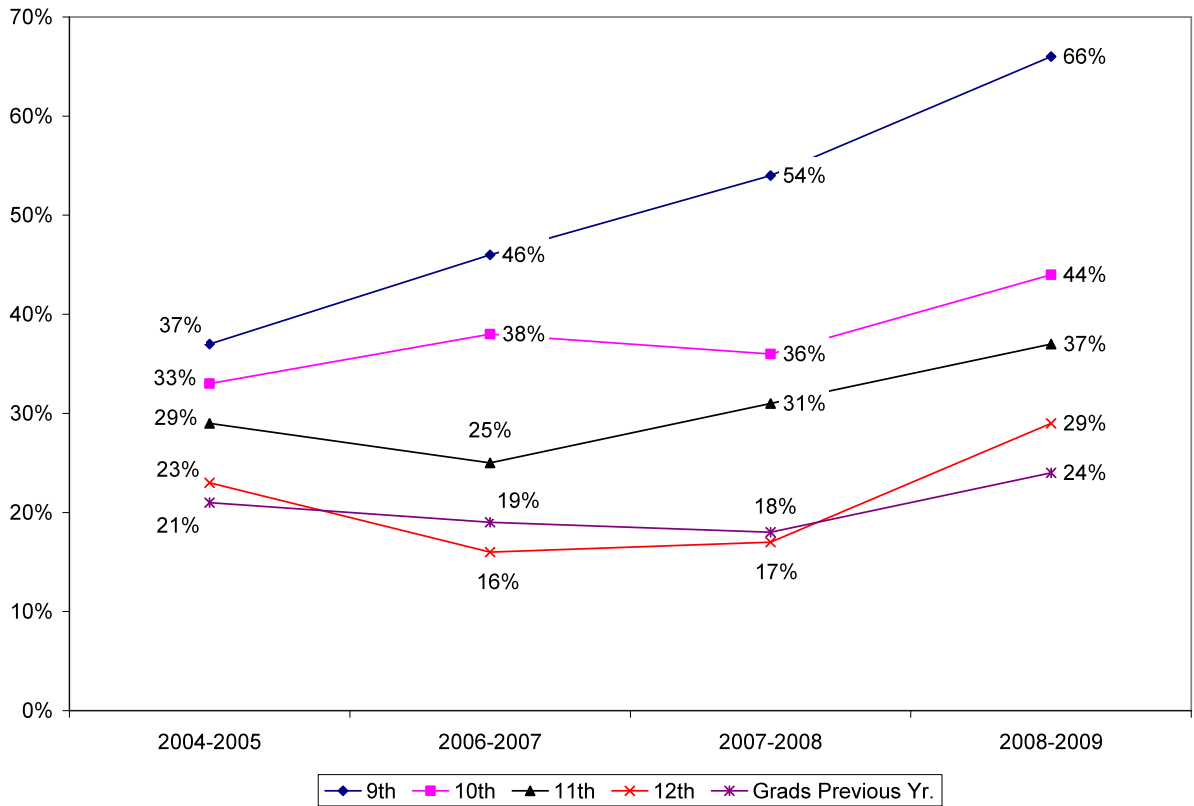
After two years of implementing these strategies, data from the pilot study showed increases in the proportion of students, especially in grades 9 and 10, who were on pace to meet course requirements for UC and CSU.

Of the six pilot high schools, three provided data that could be compared over the duration of the project. Findings show that the three schools for which data are available increased the percentages of students meeting the a-g benchmarks in grades 9 and grades 10. The **Charts** below show results for CSU benchmarks, which include a minimum GPA of 2.0. The trends are similar for UC benchmarks, which include a minimum GPA of 3.0.

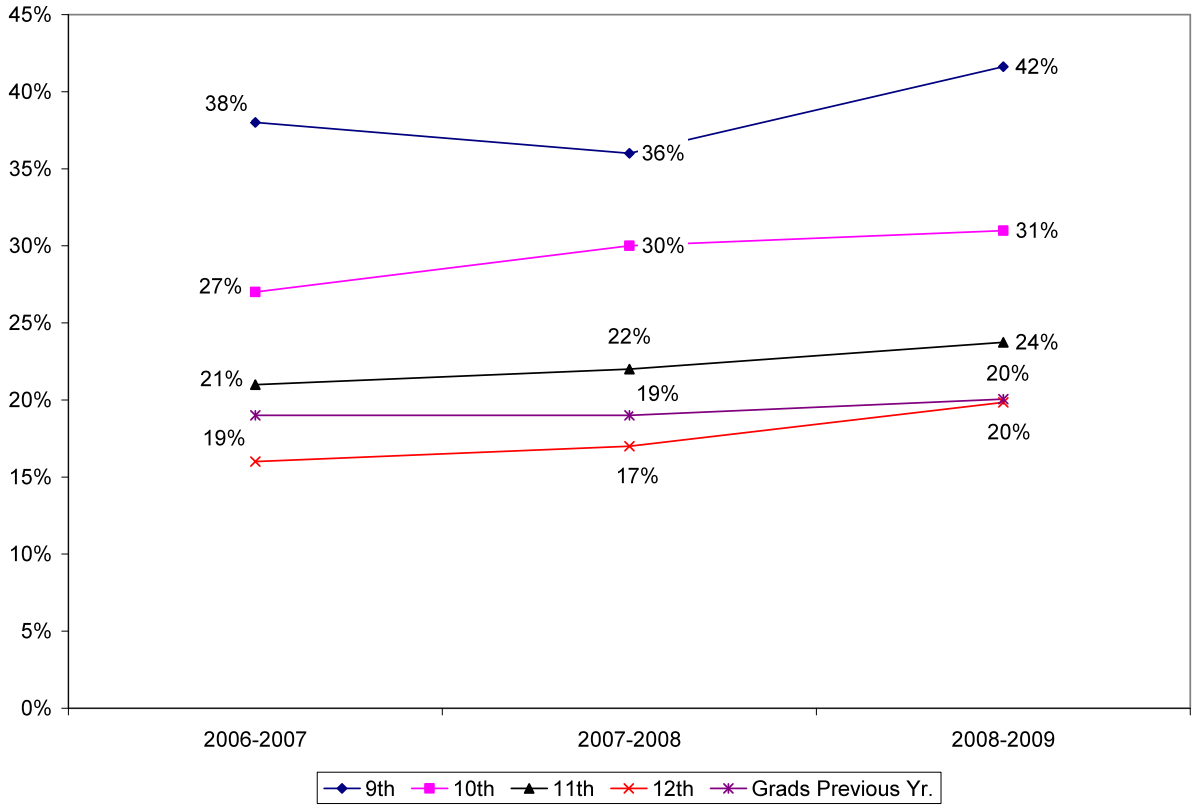
- At Burbank High School, the percentage of 9th graders who were on pace to meet the CSU requirements increased from 37 percent in 2004-2005 to 66 percent in 2008-2009. The percentage of 10th graders meeting the same benchmarks increased from 33 percent in 2004-2005 to 44 percent in 2008-2009.
- At East Bakersfield High School, the percentage of 9th graders meeting the CSU benchmarks increased from 38 percent in 2006-2007 to 42 percent in 2008-2009. The percentage of 10th graders meeting the same requirements increased from 27 percent to 31 percent over the same time period.
- At Richmond High School, the percentage of 9th grade students who were on pace to satisfy the requirements for CSU admission increased from 28 percent in 2004-2005 to 46 percent in 2008-2009. The percent of 10th graders that met the same benchmarks went up from 15 percent in 2004-2005 to 24 percent in 2008-2009.

In grades 11 and 12, the picture is more mixed with improvements on some benchmarks in some schools and declines in others. Investigators did not expect to have an impact at those later grade levels because students were too far along in their high school career when the pilot project began. See **Charts** for more details.

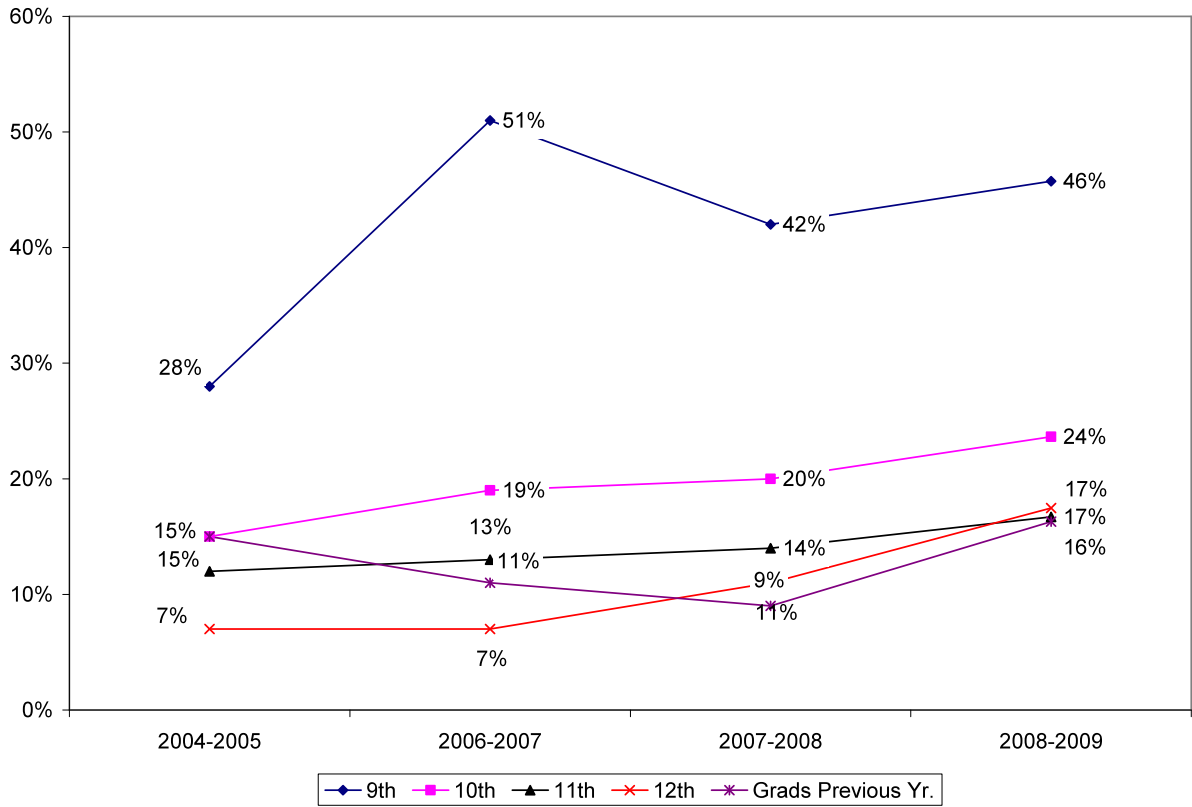
**BURBANK HIGH: Students Meeting CSU Benchmark Across Years
(2004/05, 2006/07, 2007/08, and 2008/09)**



**EAST HIGH: Students Meeting CSU Benchmark Across Years
(2006/07, 2007/08, and 2008/09)**



**RICHMOND HIGH: Students Meeting CSU Benchmark
Across Years
(2004/05, 2006/07, 2007/08, and 2008/09)**



Schools participating in the pilot project made changes to help more of their students complete the a-g requirements. For example, schools could easily see from the reports which students were only one or two classes away from meeting the a-g requirements. Some schools took steps to help those students find and complete the necessary classes to become eligible for admission to UC or CSU. Depending on the student's schedule and what opportunities are locally available, these additional classes might be at the high school itself during the regular

school year, during summer school, through independent study, or at an adult school or community college.

Schools also saw where there were “bottlenecks” in courses, that is, where a large number of students were not fulfilling an a-g requirement, such as Algebra I or English. In those cases, schools added additional sections of those classes so more students could enroll and fulfill their requirements.

In addition, schools began submitting more of their courses to be approved and listed on the “Doorways” web site. One UC Office of the President official estimated that an additional 10-15 percent of high school students could meet the a-g eligibility requirements if their high schools took the initiative to get more of their existing classes approved for the Doorways list.

For example, one school discovered that it had 16 courses that should have been approved for the a-g requirements but had never been submitted. School officials submitted those courses for approval to the Doorways list and consequently their students had many more courses to choose from to meet the requirements.

While it is impossible to tie the efforts of the pilot project directly to the results in the charts, the results are suggestive evidence that the strategy is beginning to produce the desired effects. Researchers’ efforts to raise teachers’ interest in seeing their students go on to college and their awareness of a-g requirements, the analysis of the a-g content of master schedules and the Transcript Evaluation Service workshops may have contributed to the positive trends for grades 9 and 10. At the same time, given the lack of control group data in this project, caution should be applied in claiming results. These schools are subject to many other influences as well.

Since the project ended, the three agencies involved have developed an electronic tool kit that packages the approaches, materials and activities that they used to help high schools prepare more students for college. The tool kit is available at <http://collegetools.berkeley.edu/>

Researchers reported the following challenges in using and implementing the Transcript Evaluation Service:

- Teachers and counselors needed to understand how to read and use the data, which was presented on Excel spread sheets. Not all school staff had proficiency in using Excel.
- Teachers, counselors and schools needed to understand that the Transcript Evaluation Service is a tool to help achieve the larger goal of encouraging more students to go to college. By itself, it does little to make changes if the school staff is not committed to using the information to help more students prepare for and attend college. Not all schools made use of the data from the evaluation service to implement changes.
- Teachers, counselors and school officials must believe that all students, including those at low-performing schools, should have the chance to attend college if they wish to. In some schools, researchers found teachers believed certain groups of students lacked the ability to attend and succeed in colleges.

Continuing Development of the Transcript Evaluation Service

In 2008, MPR Associates, an evaluation firm, received a three-year grant from the U.S. Department of Education to help improve and potentially expand the Transcript Evaluation Service in California. MPR researchers are also conducting a formative evaluation of the service.

Goals for the grant include:

- Developing the Transcript Evaluation Service into a comprehensive and coordinated intervention that offers useful data tools to students, counselors and school administrators.

- Supporting counselors and administrators in using the evaluation service data tools effectively.
- Compiling evidence about the feasibility of implementing the Transcript Evaluation Service in California schools.

MPR staff are working with schools that have already received the Transcript Evaluation Service as well as new schools that are using the service during the grant period. MPR is also investigating the usefulness of and barriers to using the evaluation service for schools and school districts. Additionally, staff will examine in greater depth the outcomes associated with the evaluation service and factors affecting the feasibility of expanding it statewide.

MPR will provide a final report with its findings and recommendations at the conclusion of the project in 2011.

Conclusions and Policy Implications

For many local and state policy makers in California, enabling more students to fulfill the a-g requirements has become a stated priority. However, schools generally lack the capacity to keep track of individual students' progress toward meeting a-g requirements as they advance through the four years of high school. Lack of information limits schools' ability both to provide effective counseling for students and to ensure that enough sections of a-g courses are available in each subject.

Furthermore, local and state policy currently must rely on estimates of a-g completion rates reported by the high schools, and these estimates tend to be higher than the actual completion rates.

The Transcript Evaluation Service offers a feasible procedure for obtaining accurate information each year on every student's progress toward meeting a-g requirements. It also provides a more accurate count of the numbers of graduates who completed a-g coursework and who met the GPA requirements for UC and CSU.

Results from the pilot project have several implications for policy:

- The University of California should continue to support development and use of the Transcript Evaluation Service. Drastic cuts in the UC budget due to California's fiscal crisis may jeopardize this service. Because the Transcript Evaluation Service has great potential to benefit high school students in California, UC should continue to provide at least minimal funding in the short run, and should seek to develop a business model in partnership with the State to sustain and expand this valuable service.
- The Transcript Evaluation Service should be made available to a much greater number of schools and students in California. As of 2009 it has been used in only about 80 high schools out of approximately 2,000 high schools in California.
- State and local efforts to improve academic counseling should incorporate use of the Transcript Evaluation Service to provide information to individual students as they progress through high school.
- School districts that are committed to increasing the number of students who complete the a-g sequence should use the Transcript Evaluation Service to
 - monitor individual students' completion of a-g courses as they progress through high school,
 - identify shortages of a-g class sections in particular subjects so that additional sections can be added, and
 - obtain accurate counts of the number of graduates who complete the a-g sequence and meet other admission requirements for UC and CSU.
- Programs that provide academic preparation and outreach to increase the numbers of college-ready students from

under-represented groups should use the Transcript Evaluation Service to monitor the progress of individual students during high school and obtain accurate counts of the number of students who have completed the a-g sequence when they graduate.

- In schools and districts where it is available, Transcript Evaluation Service data on the number of a-g completers should be the source of information reported to the California Basic Educational Data System, to provide a more accurate basis for local and state policy.

The Transcript Evaluation Service can provide more and better information about high school students' progress toward meeting some of the critical benchmarks for admission to public higher education in California. Better information by itself is not enough to increase college access for under-represented populations. But it can help, by giving more accurate guidance to individual students, families, schools, districts, outreach programs, and policy makers.

References

California Postsecondary Education Commission, *University Preparedness of Public High School Graduates* (Sacramento, CA, March 2005).

<http://www.cpec.ca.gov/completereports/2005reports/05-05.pdf>

UC ACCORD and UCLA IDEA, *California Educational Opportunity Report 2007* (Los Angeles, CA: Graduate School of Education and Information Sciences, 2007)

<http://www.idea.gseis.ucla.edu/publications/eor07/state/pdf/StateEOR2007.pdf>

University of California Undergraduate Work Team of the Study Group on University Diversity, *Recommendations and Observations* (University of California, September 2007).

http://www.universityofcalifornia.edu/diversity/documents/07-diversity_report.pdf

U.S. Department of Education, *Digest of Education Statistics*, 2004, Table 201.