

GOVERNMENT & POLITICS

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Cal State Puts Remediation on an 'Or Else' Basis

University system combines a tough approach with efforts to help high-school students prepare

BY JEFFREY SELINGO

LONG BEACH, CALIF. FOR MANY of the 24 students enrolled in an intermediate algebra course this summer on the California State University campus here, the stakes are high: Pass or leave the university.

The tough-love policy is part of a controversial effort by the 22-campus university system to bring its enormous remediation needs under control. Students are being told that if they do not complete remedial courses by the beginning of their sophomore year, then they will most likely not be permitted to return to classes.

Cal State officials have pledged to trim the proportion of entering freshmen who need remediation to 10 percent by 2007. It's a lofty goal; with 359,000 students, Cal State is one of the nation's largest university systems, and last year, nearly half of its incoming freshmen needed remediation in mathematics or English. Those courses contribute to an annual remediation tab of \$10-million.

A year ago, Cal State began tracking how the remedial students were doing. About 79 percent of the freshmen who needed remediation in 1998 had completed it successfully by the fall of 1999. Only 7 percent were told to leave the university and take remedial classes from a community college or other institution. The rest either left by choice or were permitted to enroll on a case-by-case basis.

HIGH STAKES FOR STUDENTS

The students here, some of who are struggling with logarithms and radicals in the summer math class, worry that they, too, may be shown the door.

"I'm scared," says Alison Lee, a business major at Long Beach. "I know if I don't do well, I can't come back. Then I might be stuck working in a restaurant instead of owning one."

To reduce the number of freshmen who need remediation, Cal State officials are taking a dual approach: cracking down on students who spend years mastering basic skills, and at the same time working with high schools to improve the academic preparedness of incoming freshmen. If the Cal State plan succeeds, it could serve as a model for sweeping changes in remediation at other public colleges, some 81 percent of which offer such classes.

"Reducing remediation had never been a priority," says David S. Spence, executive vice chancellor of the Cal State system. "Now we're focused on getting these students ready for college, especially in math and English. If they're not, then we're focused on getting them help as quickly as possible."

Cal State freshmen who need remediation are hardly academic failures. Typically, they graduated from high school with a

Who Needs Remedial Courses at California State University

The following percentages of first-time freshmen were determined, in the fall of 1999, to need remedial classes, based on their scores on placement tests.

| | Total freshmen | Mathematics | English |
|--------------------|----------------|-------------|---------|
| American Indian | 234 | 49% | 36% |
| Black | 1,584 | 74 | 64 |
| Hispanic | 6,324 | 65 | 62 |
| Asian-American | 6,599 | 42 | 63 |
| White | 11,821 | 40 | 29 |
| Other/Nonresidents | 4,625 | 41 | 41 |
| Total | 31,187 | 48% | 46% |

SOURCE: CALIFORNIA STATE UNIVERSITY

B average, in the top third of their class, according to university statistics. Nonetheless, they are not well prepared for the university's placement examinations in English and math—the barometer for who gets assigned to remedial classes. In the fall of 1998, 68 percent of first-time freshmen—19,237 out of 28,327—failed at least one of the examinations.

As a result, Cal State officials want to better align the curricula of high schools with that of the university. Last fall, the university identified 150 public high schools statewide—nearly one-fifth of the total—to set up preparation programs designed to reduce the number of prospective freshmen who need remediation. Cal State campuses are using \$9-million from the Legislature to provide training workshops for high-school teachers, increase the

number of college students who tutor in high schools, and give university-placement tests to high-school students in order to identify their weaknesses earlier.

At first, high-school teachers and college professors were hesitant about such collaborative efforts. In recent months, however, that fear has subsided. A conference here in June about partnerships between the state's colleges and public schools attracted nearly 800 participants, twice as many as organizers had expected.

LOOKING FOR REWARDS

Even so, some tension remains. During the three-day conference, many high-school teachers said they resent being told what to do by professors. And many college faculty members said they don't have the time to advise high-school teachers, particularly when the work doesn't count toward tenure or extra pay.

"In the long run, working with high schools will make professors' lives easier," says Jerald T. Ball, a math instructor on the Long Beach campus who has helped put together workshops with high-school teachers. "But without financial and professional rewards, it's difficult to convince them of that."

To attract 43 teachers from eight high schools to a weeklong math workshop here in August, the university will pay each of them \$1,000. At the workshop, Long Beach professors will share course outlines for six freshman-level math courses, discuss teaching methods, and review the state's math-and-science standards. That information will be used by the teachers and professors to write several comprehensive math tests that the teachers can use in their high schools this fall.

"In a way, you're teaching to the test," says Arthur K. Wayman, chairman of the math department at Long Beach. "But the hope is that through this exercise, there

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will be an honest alignment of the curriculum, so that students will do better on the SAT and the math-placement test."

Neither the professors nor the high-school teachers know if yet more tests will be enough to reduce the remedial rolls. It could take several years before the results are in. But the workshop's organizers think that exams written from scratch by people in the trenches could better focus the lesson plans of high-school teachers.

Mr. Wayman says even more needs to be done. He particularly wants high schools to encourage more students to take a math class in their senior year. Cal State, like many other public four-year universities, requires applicants to have taken only three math courses. As a result, many students skip math in their senior year and are out of practice by the time they enroll in college. His idea: a capstone course in "real-life math," covering topics like buying a car, investing money, and understanding statistics.

Separate studies by the U.S. Department of Education and the College Board have found that a student who completes calculus in high school—usually in the senior year—is more than twice as likely to earn a bachelor's degree as a student who takes no math courses beyond algebra and geometry. Based on those studies, several states, including Alabama and Georgia, have increased their high-school-math requirements to four courses.

Indeed, many of the 24 students enrolled in the remedial class here this summer didn't take math during their senior year. If they had, some would probably be at the beach rather than inside a humid lecture hall, says their professor, Mahmood Ghamsary. "This is material they should have learned in high school," he says.

The summer course is short—two hours a day, four days a week, for six weeks. Knowing that some of the students will be required to leave the university if they

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TIM RUE FOR THE CHRONICLE

don't pass, Mr. Ghamsary occasionally uses real-life examples to focus attention on the importance of staying in college. As he explains an algebraic term, he mentions that Michael Jackson makes \$50-million a year, while Janet Jackson makes \$5-million. "What is 50 divided by 5?" he asks, writing the two numbers on the blackboard.

"Ten," the class responds, almost in unison.

"Why does Michael make 10 times what Janet does?" he asks.

"Better music," one student suggests.

"No—because Michael went to college," he responds. He was kidding, but the students seemed to buy his logic.

Many of the students won't know for several more weeks if they will have to leave the university. "I think I'm going to make it," says Jennifer Bowman, who is in her second remedial math class and needs a passing grade. "I failed the other one because we used computers too much."

Of the 4,000 students at Cal State who

still needed some form of remediation by the end of last summer, 1,440 were asked to leave the university and attend a community college or other institution for basic classes before returning. An additional 1,260 dropped out and did not complete the remedial work.

The remaining 1,300 were permitted to return "conditionally." They were either students in good standing who had only one remedial course to complete; students who could not enroll in remedial classes because of scheduling conflicts or temporary withdrawal from college; or those with acceptable explanations, like family problems, for their slow progress.

The policy requiring students to leave Cal State, at least temporarily, came under fire last year by students and professors who said it would particularly hurt minority students and those who were first in their family to go to college. Last fall, 74 percent of black freshmen and 65 percent of Hispanic freshmen in the university system needed remediation in math, com-

pared with 40 percent of white freshmen. In English, 64 percent of black freshmen and 62 percent of Hispanic freshmen needed remediation, compared with 29 percent of white freshmen. (The university does not gather information on the ethnicity of students who either complete remedial courses or are asked to leave after failing.)

The criticism has died down, says Gerald Resendez, chairman of the Chicano studies department on Cal State's Northridge campus, because the new policy "hasn't affected our students as much as we first thought."

PUNISHING STUDENTS?

Still, Mr. Resendez argues, the university's policy in effect punishes students for attending high schools that do a poor job of preparing them for college. "We should work on improving our public schools first before we start throwing students out."

But the policy has support among many state legislators, who say Cal State has spent too much time and money on remedial students. Students who can't handle the work, legislators say, should learn basic skills at the state's two-year colleges.

"I don't think it's too much to ask for students to be well-prepared to take on the incoming requirements for math and English," says state Sen. Bruce McPherson, a Republican and vice chairman of the Senate Education Committee. "If they're not prepared, C.S.U. shouldn't take on those demands."

Despite the enormous strides the university system must make to reach its 10-percent goal by 2007, Cal State officials remain confident that they will succeed.

"It's not that these students can't do it—most of them, at least," says Mr. Spence, the vice chancellor. "It's never been expected. These students could go through their junior and senior years before the finished remediation. Now it's a priority. Students and institutions are rising to the occasion."