The California State University

TEACHER EDUCATION
As the nation's largest public university system, and as the state's largest preparer of teachers, the California State University is a standard-bearer and leader in teacher preparation programs and studies. The CSU is proud of the work we do in this area, and we want the public and interested stakeholders to know about the progress and innovations taking place on each campus and throughout the statewide system.

Throughout this year, we will highlight issues such as evaluation and accountability, preparation for urban teaching challenges, K-12 partnerships, professional development and leadership, and our Early Assessment Program in a series of informational briefs that you will receive on a regular basis.

For this first issue, we have provided an overview of the CSU's role in preparing the state's teachers, as well as a major priority for California's schools; addressing the critical need for more qualified mathematics and science teachers. As California's largest preparer of math and science teachers, the CSU is in a unique position to make a major impact in this effort. Included you will find more information on our ambitious plan to double the number of math and science teachers we prepare over the next five years.

As we honor our commitment to the people of California, we will continue to seek new ways to enhance our teacher preparation and professional development programs. Our best efforts are those in which we work in partnership with others. We hope that you will find these updates useful and informative, and that you will continue to let us know if there are new ways that we can work in partnership with you and your organization.

Charles B. Reed
Chancellor
Teacher Education

The California State University is meeting its commitment to prepare high-quality teachers for California’s K-12 public schools. Teacher preparation programs are offered at 22 of 23 CSU campuses. The CSU annually prepares more than half of the teachers for California schools. In 2005, the CSU produced more than 13,000 teachers, an increase of almost 40 percent since 1999.

Increased recruitment efforts, the development of new and innovative programs, and expanded and flexible scheduling of teacher preparation programs have increased the number of teachers who complete their training in the CSU.
The CSU enrolled 18,374 teachers in its multiple subject, single subject, and special education credential programs in 2004-05.

Over the past eight years, the CSU has increased the number of credentialed teachers by 40 percent to more than 13,000 each year.

The CSU is effectively partnering with the California Department of Education and County Offices of Education in the Early Assessment Program, designed to assess and improve the college-readiness of California’s high school students. In 2006, 134,000 juniors took the mathematics EAP, and more than 200,000 juniors took the EAP in English.

- A new English course has been developed for high school seniors to improve their reading and writing knowledge and skill.
- Professional development for secondary math and English teachers has been delivered throughout the state.

During the last five years, all CSU campuses reviewed their teacher preparation programs to better align them with California’s academic content standards for K-12 students. This continues to increase the effectiveness of teachers graduating from the CSU.

Over the past six years, more than 12,000 first-year teachers and more than 9,600 experienced school leaders have provided feedback on the quality and effectiveness of CSU teacher preparation. Some of the key findings include:

- In 2006, 84 percent of CSU teachers and their employers found that CSU graduates were well or adequately prepared to teach reading in grades K-8.
- 84 percent of CSU teachers and their employers found that CSU graduates were well or adequately prepared to teach math in grades K-8.

The CSU Center for the Advancement of Reading (CAR), in its fifth year, is dedicated to excellence in literacy instruction and promoting the preparation of effective teachers and reading specialists in the California State University.

The CSU Teacher Recruitment Projects (TRP) seek to make California’s teaching workforce more inclusive. The TRP is designed by each campus to correspond to unique regional characteristics, target multiple audiences, and include strategies that have proven successful in recruiting diverse students to teaching. In response to California’s severe shortage of mathematics and science teachers, the TRP is currently focused on intensive recruitment in these areas.
A Special Focus: Doubling the Number of Math and Science Teachers

California’s schools are experiencing a critical need for additional qualified mathematics and science teachers. At the same time, the state’s industries face a significant need for a workforce prepared with mathematics, science, and technology skills essential to retain California’s economic competitiveness. Creating a foundation for a scientifically and technologically literate workforce begins with developing highly qualified mathematics and science teachers.

BACKGROUND: The CSU is the largest producer of mathematics and science teachers in California, preparing more than one-half of the teachers in these fields. As a system, the CSU’s goal is to at least double the production of math and science teachers over the next five years, from 750 to a total of 1,500 new teachers. The CSU has already expanded the math and science teacher pool by more than 37 percent, increasing the number of teachers to 1,057 credentialed annually, after only the first two years of the new program.

CSU STRATEGY: The CSU Math and Science Teacher Initiative (MSTI) includes seven comprehensive strategies. It is based on an approach in which each campus identifies its specific areas of emphasis, based on the strengths at that campus and the needs and opportunities in its region. Primary strategies are focused on recruitment of new students into the teaching profession, expanding credential production through blended programs of subject matter and teacher preparation, online courses, alignment of programs with community colleges, and flexible options for career changers, with the goal of identifying the most effective designs to scale up across the state.
COMMUNITY COLLEGE PATHWAYS:
The CSU has entered into a landmark Memorandum of Understanding with the California Community Colleges system, focused on facilitating the pathway for community college students to math and science credentials. Components, in addition to course and program articulation, include cross-enrollments, dual admissions, and early academic advising.

FINANCIAL SUPPORT FOR STUDENTS:
A major component of the CSU initiative focuses on maximizing financial aid resources and ensuring they are readily accessible to math and science credential candidates. Twelve CSU campuses have received National Science Foundation grants enabling them to award scholarships of up to $10,000 for each of two years to future math and science teachers. California’s Assumption Program of Loans for Education (APLE) pays back up to $19,000 in educational loans for students planning to be math or science teachers. CSU campuses made more than 4,000 APLE awards this year, representing more than $45 million in potential debt reduction for future teachers.

ADDITIONAL INFORMATION: The CSU Math and Science Teacher Initiative involves all 22 of the campuses with credential programs. Additional information about the initiative and individual campus programs is available on the MSTI website at www.calstate.edu/mathscience.
The 23 Campuses of the CSU

- Humboldt
- Chico
- Sacramento
- Stanislaus
- Fresno
- Sonoma
- Maritime
- San Francisco
- East Bay
- San José
- Monterey Bay
- Bakersfield
- Northridge
- San Bernardino
- Fullerton
- San Luis Obispo
- Channel Islands
- Los Angeles
- Dominguez Hills
- Long Beach
- CSU Chancellor's Office
- Pomona
- San Marcos
- San Diego