

AGENDA

COMMITTEE ON EDUCATIONAL POLICY

Meeting: 9:20 a.m., Wednesday, September 19, 2007
Glenn S. Dumke Auditorium

Herbert L. Carter, Chair
Carol R. Chandler, Vice Chair
Jeffrey L. Bleich
Debra S. Farar
George G. Gowgani
William Hauck
Peter G. Mehas
Lou Monville
Jennifer Reimer
Craig R. Smith
Glen O. Toney

Consent Items

Approval of Minutes of Meeting of July 10, 2007

Discussion Items

1. Meeting Accreditation-Driven Quality Standards in State-Supported Business Graduate Programs with Revenue Support Derived from a Professional Fee, *Information*
2. Faculty-Student Research and Mentorship Special Focus: Engineering, *Information*
3. California State University Remediation Policies and Practices: Overview and Prospects, *Information*
4. Doctor of Education in Educational Leadership—Fall 2007, *Information*

**MINUTES OF THE MEETING OF
COMMITTEE ON EDUCATIONAL POLICY**

**Trustees of The California State University
Office of the Chancellor
Glenn S. Dumke Conference Center
401 Golden Shore
Long Beach, California**

July 10, 2007

Members Present

Carol R. Chandler, Vice Chair
Roberta Achtenberg, Chair of the Board
Debra S. Farar
William Hauck
Peter G. Mehas
Lou Monville
Charles B. Reed, Chancellor
Craig R. Smith
Glen O. Toney

Approval of Minutes

The minutes of May 15, 2007 were approved by consent as submitted.

Proposed Title 5 Revision: California Code of Regulations, Impacting California State University Student Housing Operations

This action item was initially reviewed for information by the Committee on Educational Policy for information during the May meeting. The item proposed an update to the California Code of Regulations Title 5 sections pertaining to student housing operations. Presented by Richard West, executive vice chancellor and chief financial officer, the Title 5 changes were recommended as responsive to changes in on-campus operations. The committee unanimously recommended approval by the board of the proposed resolution (REP 07-07-05).

California State University Alcohol Policies and Prevention Programs: Third Biennial Report

Presented by Charles B. Reed, chancellor, John D. Welty, president, California State University, Fresno, and Allison G. Jones, assistant vice chancellor, student academic support, academic affairs, the third biennial report on the implementation of the Trustees' Alcohol Policies and Prevention Programs summarized activities that occurred on campuses in the two years since the second biennial report was presented to the Board of Trustees in July 2005. Highlights included Campus Policies, Enforcement and Legal Issues, Education and Prevention Programs, Training, Intervention, Treatment, Assessment, and Resources, and Increased Student Leadership and Involvement. To demonstrate the extensive use of media and technology for student focused public service announcements, the Committee also viewed several video clips and heard several sound bites.

Report of Peer Visits Focused on Campus Actions to Facilitate Graduation

In furtherance of the Board's graduation initiative, campuses have welcomed teams of peer visitors to review campus actions to facilitate graduation. A partnership between the Division of Academic Affairs in the Chancellor's Office and the Academic Senate CSU successfully formed the peer review teams. Gary Reichard, executive vice chancellor and chief academic officer introduced President Zingg, who presented several campus initiatives, previously examined by a peer team, which exemplify student success and retention at California State University, Chico. Highlights included the AASCU Latino/Hispanic Graduation Rate Study (3/6-7), work with "At Risk" First Year Students, GPA Calculator (for Undergraduate Students), and a summary of the Online Learning Experience (OLLE). Chair Achtenberg proposed an assessment of systemwide best practices to share with the Board of Trustees and the California State Legislature. Trustee Smith recommended that any comparisons for rates of student success feature improvements over time for each campus.

Doctor of Education in Education Leadership—Implementation Update

CSU faculty and administration have worked together to create policies and procedures to guide the development of independent CSU Ed.D. programs. As specified in legislation, the programs emerged from meaningful partnerships between CSU campuses, P-12 institutions, and California Community Colleges. Gary W. Reichard, executive vice chancellor and chief academic officer presented an overview of the programs and noted distinctive features of the CSU Ed.D. as a professional doctorate among each of the seven programs (CSU Fresno, CSU Fullerton, CSU Long Beach, CSU Sacramento, CSU San Bernardino, San Diego State University, and San Francisco State University). Further, Dr. Reichard noted that each of the seven campuses has developed a rigorous, three-year Ed.D. program suitable for full-time working professionals. Six campuses have received accreditation and one is in the process of completing accreditation from the Western Association of Schools and Colleges (WASC). Director of Teacher Education and

Public School Programs Joan Bissell confirmed that demand for CSU Ed. D programs is strong. Lieutenant Governor John Garamendi expressed his desire to ensure that funds are available to meet program demand.

Developing a Faculty Pipeline

Gary W. Reichard, executive vice chancellor and chief academic officer and Jackie R. McClain, vice chancellor of human resources, presented for information the process which provides a diverse pool of prospective faculty committed to the mission of the CSU. CSU campuses already have begun to recruit faculty from this pool, which is more reflective of the CSU student body. Three programs contributing significantly to the develop of a faculty pipeline were presented to the Board: The California Forum for Diversity in Graduate Education, the CSU Pre-Doctoral Program, and the CSU Chancellor's Doctoral Incentive Program (formerly the Forgivable Loan Program).

California State University Contributions to Building Science, Technology, Engineering, and Mathematics (STEM) Workforce: Focus on the Mathematics and Science Teacher Initiative (MSTI) and the Professional Science Master's (PSM) Programs

Two relatively new CSU systemwide initiatives, the Mathematics and Science Teacher Initiative (MSTI), and the Professional Science Masters' (PSM) program, are addressing STEM pipeline issues at the post-baccalaureate level. Gary W. Reichard, executive vice chancellor and chief academic officer, Elizabeth Ambos, assistant vice chancellor for research initiatives and partnerships, and Joan Bissell, director of teacher education and public school programs presented to the Board how both initiatives are on track to produce significant results, and to have state and national impact. Lieutenant Governor John Garamendi acknowledged the importance of supporting these programs with public funds.

Trustee Chandler adjourned the meeting.

COMMITTEE ON EDUCATIONAL POLICY

Meeting Accreditation-Driven Quality Standards in State-Supported Business Graduate Programs with Revenue Support Derived from a Professional Fee

Presentation By

Gary W. Reichard
Executive Vice Chancellor
and Chief Academic Officer

Richard P. West
Executive Vice Chancellor
and Chief Financial Officer

Summary

The CSU expects to implement in fall 2008 a professional fee of \$210 per semester unit upon all students in state-supported M.B.A. and similar professional business graduate programs, with 25% of the revenue set aside to support students who show financial need. Projections are that this additional fee would bring the estimated total CSU price to 94% of the estimated fall 2008 total price at CPEC comparison *public* institutions. The same total CSU price would represent 76% of estimated average tuition and fees at all CPEC-defined CSU comparison institutions (public and private); 46% of estimated average fees charged by the Irvine, Riverside, and Davis campuses of the University of California; and 35% of estimated average fees charged by all 5 UC campuses (including UCLA and Berkeley).

Upon the implementation of this fee, CSU deans of business will be expected to propose for campus provost and president approval (a) improvements in professional support for business faculty, with the goal of increasing success rates in recruiting academically well-qualified faculty; and (b) programs to recruit and support graduate students, and to assure students' professional success. Internships, where appropriate, could be included as part of a plan.

With an appropriate return of revenue to student aid, with new resources made available for student recruitment and support, in an environment where some employers may be expected to subsidize student fees, and with an expectation that graduate degree program enrollments will no longer be severely constrained due to faculty shortages, such a fee is projected to promote access. Certainly, continued accreditation will make programs attractive to prospective students, and to their employers.

Background

California State University (CSU) professional business graduate programs need additional revenue in order to produce the right leadership for California commerce and industry. AACSB International accreditation marks essential quality, which employers, students and business education professionals all demand. This accreditation, awarded to whole schools/colleges of business (rather than to particular programs), benefits all students, undergraduate and graduate.

AACSB accreditation sets standards for faculty academic and professional qualifications, that cannot be met in the current revenue environment. The principal difficulty lies in hiring academically well-qualified faculty. As of March 2007, CSU counted 200 unfilled tenure-track positions in business, with 120 searches authorized; and experience teaches that not all authorized searches end in success. Recruitment is challenging because the CSU has found it difficult to meet national norms for salary and working conditions for academically well-qualified business faculty. In 2006, CSU paid business “full” Professors 74% of the national average. As a specific example, Professors of Marketing were paid 79% of the mean for public accredited business schools. For Professors of Finance, the comparable figure was 73%.

Importantly, enrollments in CSU state-supported graduate programs have stagnated or fallen in response to these hiring difficulties. Fall 2006 graduate degree program enrollments in CSU business management were just 80% of the enrollments in fall 2002. These fiscal constraints, if allowed to continue, threaten to bring about *de facto* “impaction” in a number of state-supported CSU business programs at a time when student demand is strong and rising.

The needed additional revenue can best be provided via a professional fee levy on graduate students in M.B.A. and similar professional business graduate programs. Such a fee would need to include provision for a set-aside for financial aid to ensure that the neediest students escape undue financial burden.

To consider the feasibility of such a fee, a task force comprised of CSU business faculty, campus provosts, campus vice presidents for business & finance, campus deans of business, and Chancellor’s Office staff was convened in February, 2007. The group was co-chaired by Executive Vice Chancellors West and Reichard. A substantial review paper was commissioned to support the deliberations of the task force, the recommendations from which were twice considered by systemwide provosts, by systemwide vice presidents for business & finance, and by presidents. Presidents indicated their support for the key recommendations at the August 28-29, 2007 Executive Council meeting.

Based on current student enrollment and course-taking patterns, this fee will raise the total program price (before financial aid) for an M.B.A. in the CSU to an estimated average of \$22,132. The price would be payable across the typical two years plus one or two summers that

students usually choose for the program. As noted, that total price would represent 94% of the estimated Fall 2008 total price at CPEC comparison *public* institutions; 76% of estimated average tuition and fees at all CPEC-defined CSU comparison institutions (public and private); 46% of estimated average fees charged by the Irvine, Riverside, and Davis campuses of the University of California; and 35% of estimated average fees charged by all 5 UC campuses (including UCLA and Berkeley).

Other professional business graduate programs will also be subject to a \$210 / semester unit professional fee. Some require fewer semester units than an M.B.A., and so will carry a proportionally smaller additional price. A set-aside for student aid of 25% will apply also to these other professional programs. Examples of non-M.B.A. professional graduate programs offered by colleges or schools of business administration include Master of Science (M.S.) programs in Accountancy, Business Administration, Information Systems, and Taxation. The fee would not apply to non-professional programs offered at the graduate level by colleges / schools of business, such as the M.A. in Economics.

COMMITTEE ON EDUCATIONAL POLICY

Faculty-Student Research and Mentorship Special Focus: Engineering

Presentation By

Elizabeth L. Ambos
Assistant Vice Chancellor
for Research Initiatives and Partnerships

F. King Alexander
President
California State University, Long Beach

Emily Allen
Professor and Chair
Chemical and Materials Engineering
San José State University

Eric Besnard
Professor
Mechanical and Aerospace Engineering
California State University, Long Beach

Donald Kassing
President
San José State University

Summary

One of the most valuable aspects of a CSU education for many students is the opportunity to work actively with faculty members on research, creative activities, community service work, and internships. Students actively involved in research and creative activities with faculty mentors often develop creative and critical skills, as well as broadened professional opportunities.

These presentations will review the research and mentoring accomplishments of CSU engineering faculty and students through brief testimony by campus groups from San José State University and California State University, Long Beach. The presentations will underscore the critical connections between faculty and student scholarly activity, mentoring, and professional success.

Faculty-Student Research and Mentorship: San José State University

Dr. Emily Allen is Professor and Chair of the Department of Chemical and Materials Engineering at San José State University (SJSU). After completing her Ph.D. in Materials Science and Engineering at Stanford University, she joined SJSU as an Assistant Professor in 1992. At SJSU, Dr. Allen has been active in teaching, course and curriculum development, and research in the area of properties and processing of electronic materials. She has acquired and managed almost \$4M in external grants from industry and federal agencies such as NSF and DARPA.

Dr. Allen is the Principal Investigator on SJSU's Nanoscale Materials and Device Characterization Program, and the Director of the Materials Characterization and Metrology Center. She has also been the principal investigator on grants from the National Science Foundation for curriculum development in Microelectronics Process Engineering, a highly prestigious NSF Careers grant for magnetic materials research, and a major NSF Research Instrumentation grant for the acquisition of a Scanning Electron Microscope. In 1998, Dr. Allen was awarded the Applied Materials Excellence in Teaching Award from the SJSU College of Engineering.

SJSU's Nanoscale Materials and Device Characterization Program includes collaborative and interdisciplinary research projects involving SJSU faculty and both undergraduate and graduate students from the Departments of Chemical and Materials Engineering, Mechanical Engineering, Electrical Engineering, Physics, Biology, and Chemistry. These projects involve research on materials' behavior at the nanoscale, including nanotubes, nanowires, nanoparticles and nanoscale structures in thin films. These materials will provide the building blocks for future devices for electronics and sensors.

Dr. Allen has advised 30 masters' students, and she and her students have published over 40 articles in peer-reviewed media. These students have completed laboratory research and design projects, often in collaboration with Silicon Valley companies or federal agencies, including IBM Almaden Research Lab, NASA Ames Research Center, Jabil Circuits, and Applied Materials.

Faculty-Student Research and Mentorship: California State University, Long Beach

Dr. Eric Besnard is a professor in the department of Mechanical and Aerospace Engineering at California State University, Long Beach (CSULB) and Project Director for the California Launch Vehicle Education Initiative (CALVEIN). As part of this program, he leads the work of undergraduate and graduate students working towards making low cost space access a reality. Much of this work is focused in the area of propulsion system development and analysis and is supported by various externally funded projects.

Dr. Besnard holds an engineering degree with emphasis in Energy and Material Science from the Ecole des Mines (Nancy, France, 1992), an MS in Aerospace Engineering from CSULB (1992), and a Ph.D. in Engineering and Applied Mathematics from Claremont Graduate University & CSULB (1998). He is a senior member of the American Institute of Aeronautics and Astronautics (AIAA).

Over the last 10 years, he has played major roles in research projects totaling over \$3 million, including more than \$1M as Principal Investigator in the area of liquid rocket propulsion research and development. In 2001, he established the California Launch Vehicle Education Initiative in partnership with Garvey Spacecraft Corporation (GSC). Since the partnership's inception, the academic/industry team has developed and successfully flown 9 liquid-propelled prototype launch vehicles. Another notable accomplishment was Dr. Besnard's co-development and subsequent first-ever flight test of a liquid-propelled aerospike rocket engine after more than forty years of research by NASA, the Air Force and others. This early work in aerospike engines is currently being expanded with the development of a higher performance multi-chamber aerospike engine with funding from the Missile Defense Agency.

COMMITTEE ON EDUCATIONAL POLICY

California State University Remediation Policies and Practices: Overview and Prospects

Presentation By

Gary W. Reichard
Executive Vice Chancellor
and Chief Academic Officer

Summary

This item reviews the history of remediation policy in the California State University and, drawing from a survey of CSU campuses undertaken in summer 2007, appraises current promising practices designed to bring entering first-time freshmen to college-level proficiency. Eight principles are offered at the end of the review for the Board's consideration.

Three of the principles call for system choices or actions.

Principle one states that the 1996 Board of Trustees policy goal, that 90% of incoming first-time freshmen should be fully proficient, is consistent with the existing CSU strategic plan. However, as that plan is reviewed and updated, the quantified student proficiency goal should be reassessed, and revised as appropriate.

Principle four stipulates that the CSU should continue to expect freshmen to attain proficiency within one year, especially as students are directed to an energetic early start in the initial summer, as called for in principle three.

Principle eight calls for a review and validation study of the EPT, ELM, and other related instruments (such as EAP, SAT, and ACT), and the results used to inform campus experimentation with directed self-placement and other innovative remediation placement practice.

Five of the principles ask or encourage campus actions.

Principle two tasks campuses to assess the effectiveness of their approaches to meet students' varying developmental needs, and to continue to identify—and share—practices that are found to be particularly effective.

Principle three encourages all campuses to establish or expand “early start” programs, including strong financial support to include both improved financial aid opportunities and opportunities for summer employment, for students with both significant and moderate remedial needs.

Principle five asks campuses to explore alternatives to redirection to Community Colleges, while maintaining the basic principle that students must achieve proficiency before enrolling in their second year in the CSU.

Principle six encourages campuses to develop, for students who begin their mathematics or English study at a demonstrated “nearly proficient” level, courses that offer baccalaureate credit while requiring enrolled students meet specific proficiency objectives along with goals for general education.

Principle seven encourages all campuses to develop and use technology-assisted, Internet-based learning programs for remedial English and mathematics. Consortial efforts that involve several campuses in the development of these programs are encouraged.

Brief History and Introduction

Remedial and developmental programs in the basic skills areas of reading, writing, and mathematics have been the focus of discussion by the Board of Trustees since the mid-1970s, when an Advisory Committee on Writing appointed by Chancellor Glenn S. Dumke recommended a diagnostic examination in writing for regularly admitted first-time freshmen, as well as a requirement that students demonstrate proficiency in writing as a condition of graduation. The result of these recommendations, which were endorsed by the CSU Academic Senate and approved by the trustees in May 1976, was the entry-level diagnostic test now known as the English Placement Test (EPT). The EPT has been administered to entering undergraduates since September 1977.

In the early 1980s, the CSU introduced two major curricular changes that made the undergraduate curriculum more rigorous and raised expectations for preparation by entering students: the General Education-Breadth curriculum, including the requirement that students be assessed for basic skills on entry (Title 5, Section 40402.1); and the requirement that students complete college preparatory courses in English (four years) and mathematics (two years) to be eligible for admission. Responding to these changes in admission and requirements, the chairs of CSU departments of mathematics urged that a systemwide instrument be developed as a companion to EPT to assess basic skills in mathematics (quantitative reasoning). The Entry Level Mathematics (ELM) examination was subsequently developed and was first administered

to students in May 1983. In 1992, the exam was upgraded to test for all three years of high school mathematics preparation currently required for admission.

In January 1996, the trustees adopted a policy to reduce the need for remediation in English and mathematics at the college level. Students were classified as needing remediation if they did not score a 550 on the SAT in mathematics and in English. That SAT score requirement gave the California State University the nation's highest proficiency expectation, when compared to other American regional comprehensive universities. Trustees then set a goal that, by fall 2007, 90 percent of regularly admitted first-time freshmen at CSU would be prepared at the time of matriculation to enroll in baccalaureate-level English and mathematics courses. Fall 1998 was the baseline year for assessing progress; intermediate benchmarks were set for fall 2001 and fall 2004.

In 1997, the trustees reaffirmed their commitment to determining competency in English and mathematics for entering students and to providing them with opportunities to develop necessary foundational skills. Executive Order 665, which is still in effect:

- Requires all non-exempt students to take the EPT and ELM examinations after admission and before enrollment at a CSU campus;
- Requires all campuses to place students who do not demonstrate the requisite competence in appropriate developmental/remedial education activities during their first term of enrollment and each subsequent term until such time as they demonstrate competence; and
- Requires all campuses to establish and enforce limits on developmental/remedial activity and to advise students who are not making adequate progress in developing their foundational skills to enroll in other educational institutions as appropriate.

As is now known, the CSU's remediation efforts—both on its campuses and in its partnerships with public schools—have not resulted in the level of college preparedness that trustees set in 1996 as goals for 2007. In fall 2001, 54 percent of entering freshmen were proficient (ready for baccalaureate-level work) in both English and mathematics. In fall 2004, 53 percent of entering freshmen were proficient in English and 63 percent were proficient in mathematics. Chancellor's Office staff project that in fall 2007, 57 percent of entering freshmen will be proficient in English and 66 percent will be proficient in mathematics—a slight increase from years past, but still well below the 90 percent goal. These figures are reflective of national trends. About 40 percent of all college students in the United States take at least one remedial course (Adelman, 2004). The estimated cost of remedial education to taxpayers is about \$1 billion a year (Breneman & Haarlow, 1998; see The Center for Student Success, 2007).

The persistently large numbers of students who enter four-year universities unable to do college-level work have been the subject of numerous, often contentious state and national policy

debates. Critics of developmental education at the college level emphasize the cost of remediation and argue that universities should not be in the business of teaching skills that students should have learned when they were younger. Others counter that, in our increasingly knowledge-based, globally-connected economy, it has never been more crucial to have a workforce with some education beyond high school. In other words, there are sound social and economic reasons why it is appropriate for universities to provide at least some remedial education (Phipps, 1998). A report by the Institute for Higher Education Policy went so far as to suggest that “remediation is a core function of higher education” and always has been. “What we now call remedial education has not been caused by current admissions standards, the availability of federal financial aid, or any of a number of other concerns that have been raised in the recent policy discussions,” wrote the author of the report (Phipps, 1998, vi). He contended that as an ever-growing proportion of the population sought higher education, universities would continue to play an important role in helping underprepared students gain proficiency.

In what follows, a review is provided of the various, often innovative ways that the CSU has sought to prepare students for college-level work and, more broadly, for entry into the social and economic mainstream of California. The first part of the review offers an overview of the collaborative partnerships the CSU has formed with the public schools in an effort to provide students with the basic skills in English and mathematics they need *prior* to matriculating at CSU institutions. The second part of the review highlights the results of a survey that appraised campus efforts to bring students to proficiency *after* they have arrived at the CSU. The review concludes with eight “guiding principles” for the Board’s consideration that emerged from the scan of existing programs and practices and survey results.

Collaborative Partnerships: The CSU-K-12 Connection

To be admitted to the CSU, freshman applicants need to have earned a high school diploma or equivalent, completed a college preparatory curriculum, and have grade-point averages (GPAs) and standardized test scores that place them in the top one-third of their graduating class. Currently that means coming from a pool of high school graduates who:

- Completed 4 years of English instruction with a C or better;
- Completed 3 years of mathematics instruction with a C or better; and
- Earned a 3.0 grade point average.

CSU Board of Trustees policy states that students admitted to the CSU are classified as English or mathematics proficient if they score:

- 550 or above on the mathematics section of the SATI-Reasoning Test; or
- 550 or above on the verbal section of the SATI-Reasoning Test.

Until the Early Assessment Program (EAP) was initiated, CSU placement standards were not fully aligned with the state board standards in English and mathematics that govern the K-12 public schools. This lack of alignment underscored the need for CSU to work closely with the State Board of Education and the California Department of Education to align CSU placement standards with those promulgated by the state board.

Early Assessment Program components included the assessments of English and mathematics proficiency of public high school 11th graders – the exams; the EAP professional development programs for high school teachers; the CSU Math Success and English Success websites for students; and refined CSU preservice programs offered to aspiring middle and high school teachers. These innovations have been the focus of reporting at several previous trustee meetings. A short recap may be useful.

The EAP Exams. Continued low proficiency rates for first-time freshmen entering the CSU strongly suggested that incoming students needed to be assessed earlier than immediately prior to matriculation in order to determine whether they were on track to be ready for college-level English and mathematics, and to give them a chance to become ready if they were not. The Early Assessment Program (EAP)—a collaborative effort by the CSU, the California Department of Education, the State Board of Education, and the State Superintendent of Public Instruction—was developed to perform this function. The EAP provides students, their families, and high schools with the opportunity to assess 11th grade student readiness for college-level English and mathematics-- i.e. skills that students who choose either to enter college or to enter the workforce directly out of high school will need in order to be successful. It does this through the use of augmented English and mathematics California Standards Tests (CST) that incorporate questions reflecting CSU placement standards. The public response to these exams, which are voluntary for 11th grade students, has been overwhelming, with increasing numbers of students taking them each year.

The EAP's Professional Development Programs. In addition to the exams for 11th grade students, the EAP offers several professional development opportunities to high school teachers. The Reading Institutes for Academic Preparation (RIAP) program is intended to help teachers to implement standards-based approaches to improve students' academic literacy in all subjects. More than 2,500 teachers have participated in RIAP since its inception in 2001-02. An independent evaluation of the program found that in schools with sizable participation in RIAP, there was an increase on the statewide 11th grade California Standards Test (CST) in English-Language-Arts. The gains among these students between the years 2003 and 2006 were almost four times as large as the statewide gain (14 points vs. 3.6 points) and more than twice as large as found in control schools (14 points vs. 6.7 points) for the same period.

Another EAP-related innovation, the Expository Reading and Writing Course_(ERWC), is designed to prepare students to meet the expectations of college and university faculty in English and is aligned with the California English-Language Arts Content Standards for grades 11-12. CSU English faculty, K-12 English teachers, and curriculum specialists developed a full-year college preparatory English course for high school juniors and seniors. Course assignments, organized into 14 modules and based mainly on non-fiction texts, emphasize the in-depth study of expository, analytical, and argumentative reading and writing. To promote wide-scale adoption of the Expository Reading and Writing Course, the CSU and County Offices of Education collaborate to provide professional development for English teachers at a variety of locations across the state. Since the introduction of the ERWC in 2004, more than 2,200 teachers have participated in these workshops and piloted the ERWC modules. An independent evaluation of the ERWC has found that, in schools in which five or more English teachers participated in ERWC workshops, the percentage of students who score as proficient in English improved substantially.

In addition, a committee of secondary mathematics educators and CSU mathematics professors created a professional development program for mathematics teachers who teach Algebra II and higher. The program, which includes two full days of professional development, began in 2005-2006 and has served 1,300 teachers to date. Workshops provide an introduction to the EAP and specific approaches for improving the college readiness of high school students in mathematics.

The EAP and CSU Preservice Programs. The integration of the EAP into preservice teacher preparation began in 2005-06 and continued in 2006-07 through workshops offered to CSU faculty who teach methods courses in mathematics and English. The aim of the workshops was to inform the faculty of the EAP's professional development opportunities for individuals who teach these subjects in high school and to consider ways in which the information might be provided to candidates prior to earning their Single Subject credentials. Many CSU faculty who provide professional development programs to teachers at the high school level have established innovative practices for infusing that material into their preservice coursework.

Evaluation questions assessing the impacts on the secondary English and mathematics teachers prepared by the CSU will be integrated into the annual Systemwide Evaluation of Teacher Preparation beginning in 2007-08. In addition, EAP strategies will be incorporated into the preservice preparation of educational administrators. Twenty CSU campuses offer education leadership programs at the preservice level, preparing close to 60 percent of the new administrators in California. Similarly, lessons learned from EAP will be integrated into the curricula of the CSU's emerging Ed.D. programs.

CSU Math and English Success Websites. The Math and English Success Websites (see www.csumathsuccess.org and www.csuenglishsuccess.org) provide high school students, parents, teachers, and counselors with resources for helping students become ready for college-

level work in mathematics and English. These websites encourage students to take ownership of their path to college by providing them with personalized, authoritative advice about the CSU English and mathematics placement requirements and how to meet them; testimonial videos which show the importance of taking proactive steps to prepare for the CSU in the most efficient and expeditious manner; and online learning resources which provide free 24/7 access to high quality tutorials which are aligned to the CSU mathematics and English placement content.

To date, the CSU Math and English Success Websites have registered over 200,000 cumulative visits. Math Success attracts roughly 7,000 visits and English Success attracts roughly 4,000 visits per month. Among the most popular resources on the Success websites are the learning materials, which offer assessment-driven analysis of student preparation in mathematics and English. These resources include:

ALEKS - an intelligent tutor that uses adaptive questioning to determine quickly and accurately exactly which ELM concepts a student knows and doesn't know. ALEKS' adaptive questioning approach is based on knowledge space theory, which stresses repetition of a series of like problems until mastery is achieved. The CSU ALEKS ELM Prep tutorial is currently being used by six CSU developmental mathematics programs and 18 high school mathematics classes. Between August 2005-July 2007, more than 15,000 enrolled CSU students and potential CSU students signed up for the online prep course. A detailed description of ALEKS ELM programs is provided below.

Online EPT Practice Tests - four online multiple choice tests with questions taken from retired English placement tests. Students receive a score report with an itemized list of their performance in eight categories along with feedback about why their answers were correct or incorrect.

Calibrated Peer Review – an online essay writing tool that uses retired essay prompts and an automated rubric grading system to prepare high school students for the EPT. Approximately 60 high school English teachers have signed up for this service through the English Success Website, and over 2,000 students have participated.

Contextual Issues and Concerns: Proficiency Standards and Demographic Shifts

As outlined above, the CSU's partnership with California public schools has had promising results. However, as proficiency figures demonstrate, the number of admissible students who are unprepared for college-level work remains high.

Some critics suggest that the CSU's proficiency standards should be changed. Such a suggestion disregards the fact that CSU proficiency standards at entry align with California's English and

mathematics standards for high school students. Students who demonstrate college-level readiness at the end of the 11th grade on the EAP English test tend to be those who are advanced in their performance on the CST English. In mathematics, those whom the CSU says will be ready one year from now—even if they take no higher level mathematics in their senior year—also tend to be those who post “advanced” scores on the CST Algebra II or Summative High School Mathematics examinations. Moreover, a recent study by the National Center for Education Statistics (2007) suggested that California standards are much better aligned with the expectations of the National Assessment of Educational Progress (NAEP) than are the standards set by many other states.

This reaffirmation of CSU and California public school standards is occurring against the backdrop of dramatic demographic change. English language learners comprise nearly 40 percent of all K-12 students in California (California Community Colleges Center for Student Success, 2007). More than 166,000 children for whom English is a second language are currently in the second grade. These children, and others like them, are now being referred to as “Generation 1.5.” They share a common experience, having been educated in California or other U.S. public schools, but having grown up in homes where the language spoken is not English (Ching, 2005). Dr. Robby Ching, chair of the Learning Skills Center at CSU Sacramento, describes the academic challenges that these children will likely face:

By fourth grade when reading and writing demands are dramatically ratcheted up, many will begin struggling to keep up with the academic demands as they are simultaneously developing their language skills ... Without English language support at home, they don't have adequate literacy in English, and they usually have not had an opportunity to learn to read and write in their first language so those resources are not there to fall back upon either. Instead they have oral fluency, often in a non-standard variety of English used in their community, and a certain amount of cultural knowledge (5).

Noting that “students who are still learning English in grades 4, 5, 6 risk falling behind in academic proficiency and failing to master the skills needed for success in middle and high school,” Ching writes, “It's not surprising that they enroll in the university still having gaps in those areas” (5). By all accounts, filling in those gaps is crucial to California's social and economic health. According to a report issued in May 2007 by the Public Policy Institute of California, the state needs to produce 2.9 million college graduates between now and 2025 to meet future demands for highly skilled workers (Taiz, 2007). Anne Driscoll (2007) of the University of California says that, if California is to develop the diverse and educated workforce it needs, policies and interventions must be identified to increase the chances of academic success for Latino and African American high school students in particular.

With this history and context as points of departure, a survey was conducted in June 2007 in an effort to discover how CSU campuses—continuing to face high numbers of incoming students needing remediation—were preparing these students for college-level work. Of particular interest was how, if at all, developmental/remedial education at CSU was impacted by a burgeoning group of language minority students.

Survey of CSU Campuses on Practices and Concerns Regarding Developmental and Remedial Education

In June 2007, campuses were surveyed in an effort to discover how students are being prepared to achieve full college-level proficiency in English and in mathematics after matriculating to CSU. From this survey we are able to provide a snapshot of several important, innovative, and promising approaches to remediation that campuses have taken, as well as contextual richness and concerns.

Background and Context: Students and Their Readiness

Students at Various Stages of Readiness. Students arrive at CSU fully compliant with CSU admissions criteria, yet at various stages of readiness for college-level work. At most campuses, scores on the English Placement Test (EPT) and Entry Level Mathematics (ELM) exam determine which composition and mathematics courses they will take. Typically, cut-off scores are used to place students in three general categories of courses— courses for those with minimal remedial needs, who are very nearly proficient; those with moderate remedial needs; and those with significant remedial needs, who are a substantial distance away from full proficiency. The more significant the remedial need, the more basic the course content and the more intensive the remediation efforts in the courses in which the student is placed. The range in the readiness of students for college-level work spawns experimentation with various approaches to remediation. The quest is to take students to proficiency efficiently and effectively.

Non-English and Non-Standard English Backgrounds. Perhaps not surprisingly, language acquisition—characterized by students who are working on learning English or Standard English—was consistently mentioned by survey respondents as the single largest factor influencing student performance in reading and writing courses. Respondents had in mind students whose households spoke a language from Europe or Latin America, for example, such as Spanish; or a language from eastern Asia, such as Chinese. They also had in mind students whose households or communities speak informal or “street” English in strong preference to standard English. Either background makes the college environment a challenge. “Many years of research in language acquisition show that learning a second language is a slow process, one that may take many years,” wrote a respondent from CSU Chico, who added that a year of

developmental/remedial activity for such students simply might not be enough. Language acquisition was also mentioned as a factor affecting student performance in mathematics courses.

Other Barriers. Campuses identified several other barriers to readiness including:

Commitment: “students don’t take their studies seriously enough;”

Test experience: “students do not have enough experience taking timed pressured tests;”

Stigma: “students have a negative attitude towards the classes because of the ‘developmental’ designation;”

Familial obligations: “geographical distance from home coupled with cultural displacement, especially for urban students from cultures that prioritize familial obligation;”

Lack of prior instruction: “insufficient preparation in high school;” and

Misplaced pride: “an unwillingness to take the time to seek help.”

Early Starts

Survey results point to the potential value of an “early start” on remediation, in the summer prior to a first-time freshman’s initial fall term. Summer Bridge and other early start programs provide students—especially those who have significant remedial needs, many of whom are the first in their families to attend college—with time to learn the ropes of college and to make the kinds of progress necessary to reach college-readiness in English and mathematics by the end of the freshman year. The greatest barriers to offering adequately long and sufficiently intensive summer opportunities are: (1) students’ interest in summer employment to cover their contributions to financial aid and to help support their families and (2) the lack of adequate federal and state financial aid for summer.

In summer 2006, eight campuses provided a total of 544 incoming students with remedial opportunities in English, and 14 campuses provided a total of 1,348 incoming students with opportunities to pursue basic proficiency in mathematics. By the end of the 2006-07 academic year, five of the campuses that offered summer remedial opportunities in English had successfully prepared more than 90 percent of their students for baccalaureate-level work (including, of course, those who achieved proficiency during the academic year). During that same period, seven of the campuses that offered summer opportunities in mathematics had successfully remediated at least 90 percent of their students.

Students who seek an early start on remediation have several different types of opportunities in addition to Summer Bridge. CSU San Marcos runs a six-week Summer Academy for all incoming first-year students who failed the EPT and/ or the ELM. CSU Fullerton, Cal Poly Pomona, and San Diego State offer all incoming freshmen with remedial needs in English a chance to begin their developmental classes in the summer, and CSU Los Angeles offers composition classes to students with moderate or minimal remedial needs. An early start seems

an obvious strong practice. Assuring early start programs raises consideration of budget strategies: we discuss dedicated funds sources below, in the recommendations section.

For students with remedial needs in mathematics, campuses offer intensive instruction that varies in length from 10 days to six weeks. For students who barely failed the ELM, CSU Fullerton provides an online course (described below). CSU Bakersfield offers students in the same category an opportunity to participate in a 10 day, three-hour a day “early start” program. Similar students at CSU Long Beach are invited to take a four-week “last chance” mathematics workshop. The Office of the Dean of Undergraduate Studies at CSU San Bernardino runs an Intensive Mathematics Program each summer that consists of two 10-day sessions in which students are given a crash course in elementary and/or intermediate algebra. Those who pass the intermediate algebra portion are deemed remediated and may enroll in GE mathematics courses in the fall. Those who pass only the beginning algebra portion are allowed to register for intermediate algebra in the fall. CSU San Bernardino reports that the program has been highly successful, with a passage rate of about 90-95 percent for students in the intermediate portion of the program and about 95-98 percent for participants in the beginning algebra portion.

A few campuses provide opportunities in the summer following their initial academic year for students who did not complete remediation across their initial college year. These campuses include CSU Northridge and San Diego State in English, and CSU Chico, CSU Northridge, San Diego State, and San Jose State in mathematics.

Developmental/Remedial Education Approaches in English

Directed Self-Placement in English. Two campuses have eschewed the use of EPT scores to place students in first-year writing courses, arguing that single timed tests are unreliable predictors of a student’s ability to succeed in college-level work. CSU Channel Islands and CSU Fresno have adopted instead “directed self placement” (DSP) programs, which allow students with remedial needs in English to choose, with guidance, which composition courses to take. Students at CSU Channel Islands have two choices—they can take two 3-unit classes that “stretch” over two semesters with the same instructor and classmates, or they can take a one semester, 3-unit course. The “stretch” option is the more basic of the two and emphasizes the development of writing strategies. The one-semester option is designed for students who are ready for college writing and emphasizes research writing. In addition to offering a one-semester, 3-unit “accelerated” option and a two-semester, 6-unit “stretch” option, CSU Fresno has a 9-unit option that provides students who are multilingual speakers with an extra semester to work on their English before taking composition classes. CSU Fresno, which only recently implemented the DSP, reports that initial evaluations of the program have been positive. CSU Channel Islands, which implemented the DSP the first year the campus offered courses, has systematically evaluated the program and consistently found promising results. “For four years,

we've demonstrated that students make appropriate choices about which writing courses to take, and that mainstreaming all students in baccalaureate writing classes works," wrote a survey respondent at that campus.

Credit-Bearing English Course Placement. Other CSU campus efforts have focused on students who are nearly proficient at entry. CSU Channel Islands, CSU Fullerton, Humboldt State, CSU Northridge, CSU San Bernardino, and San Francisco State simply place such students in credit-bearing baccalaureate-level courses. This approach has been spurred within the CSU by the results of a five-year study conducted by researchers at San Francisco State University, which showed that placement in explicitly labeled developmental courses often discourages at-risk students and decreases the likelihood of their staying in college and graduating. They found that, in contrast, placing students in intensive, credit-bearing baccalaureate-level courses accelerated their sense of competence and eventual success. CSU Channel Islands, Humboldt State, and CSU San Bernardino have reported similar findings. The survey respondent at Humboldt State summarized this dynamic, writing that integrated courses encourage students to perceive themselves more as "'real' students instead of 'dummy' students in 'bonehead' English." Because these courses do not carry the stigma of remediation, the argument is, students feel as though they belong in college and, therefore, are more likely to persist in their pursuit of the baccalaureate degree.

Campuses continue to try to identify ever more effective ways to meet the multiple remediation needs of students. For example, CSU Dominguez Hills will be piloting three new approaches to developmental English fall 2007. One will place students with minimal remedial needs in a 4-unit GE English course with supplemental instruction; another will place students with moderate remedial needs in a combined one-year "stretch" course with the same instructor and students; and the third will place students who continue to have significant remedial needs after one semester in an intensive 5-unit course in spring. Also effective this fall, Sonoma State University will no longer require two semesters of remediation for students with moderate to significant remedial needs. Instead, these students will be placed in one 4-unit course and will be additionally required to take 1 unit of tutoring through the campus Writing Center. According to the survey respondent for Sonoma State University, the campus hopes this approach will result in a high percentage of students completing their remedial work in one semester as opposed to the previously standard two semesters.

Community College Remedial Instruction on CSU Campuses. Although redirecting CSU students to community colleges has produced disheartening results, community colleges nevertheless can—and should—take an active role in the remediation of these otherwise admissible students. San Diego State's arrangement with San Diego Community College is a promising example. For the past five years, community college instructors have taught the vast majority of San Diego State's remedial courses in English and mathematics on the university's

main campus. With this arrangement, students are able to continue their remedial education while maintaining their “identify” as San Diego State students. Such an arrangement helps these students to remain engaged, not only physically but psychologically, with the university in particular and in their education more generally.

Standard English Learner Approaches. Meeting the basic skill needs of students whose primary language is not standard English is a special concern, and indeed an increasing concern as such students increasingly find their way to CSU. As noted, several campuses noted explicitly in the survey that these students face unique learning challenges, in both English and mathematics. In response to this challenge, CSU Fullerton, CSPU Pomona, CSU Sacramento, and San Francisco State have designed developmental reading and writing courses that have an explicit multilingual component in addition to offering courses intended primarily for native speakers. Placement in these courses is determined in a variety of ways—San Francisco State, for example, looks at student scores on the ESL Placement Test, and CSPU Pomona relies on a personal interview and diagnostic essay in addition to EPT scores. CSU Northridge’s remedial course offerings reflect an acknowledgment that culture, in addition to language, can shape a student’s learning. That campus offers developmental reading and writing courses in three departments other than English: Asian American Studies, Chicana/o Studies, and Pan African Studies.

Developmental/Remedial Education Approaches in Mathematics

Varied Sequential Remedial Mathematics Approaches. There is enormous range in the readiness of students for college-level mathematics. Some students are ready for standard term-length or year-long courses. Yet other students have been so underexposed to college-level mathematics expectations that a variety of approaches have been put forward as CSU campuses seek effective pathways to mathematics proficiency. Both CSU Stanislaus and CSU Long Beach have reconceptualized their intermediate algebra courses so that they are aligned with different types of academic majors—for example, in fall 2007, CSU Long Beach will offer basic intermediate algebra to students pursuing non-technical majors, and enhanced intermediate algebra to students who plan to major in business, science, engineering, or education. The mathematics chair at CSU Long Beach said the department moved to offer the two separate tracks in recognition of the different skill sets that are required of the different majors.

Technology and Computer-Aided Instruction in Mathematics. New technology and computer-aided instruction are playing an increasingly important role in preparing students for college-level mathematics. CSU Fullerton offers a summer, online short course for students with a “barely failing” score on the ELM. Most students have been able at the end of the course to show readiness for baccalaureate-level mathematics. The logic is apparent, and attractive. Many of these students were proficient at one juncture (while still in high school), but discontinued mathematics courses or courses that use mathematics skills, and forgot some of the material. In

one intensive week, these students can once again achieve and demonstrate proficiency in mathematics.

Campuses that supplement traditional lecture with new technology report similarly impressive results. Pass rates in the traditional lecture courses at CSU Los Angeles have improved since the introduction of an online homework package. CSU San Bernardino—noting the learning benefits and cost-effectiveness of new technology—reports plans to start using a similar program. CSU Channel Islands has a computerized algebra problem-solving lab that requires students to perform tasks of progressive complexity and difficulty, and CSU Fresno, CSU Sacramento, and Cal Poly San Luis Obispo report successful use of ALEKS, a web-based mathematics and learning system that is also available to students while they are still in high school via CSU's Early Assessment Program. ALEKS uses adaptive questioning to quickly and accurately determine exactly which ELM concepts a student knows and doesn't know. Fresno and Sacramento use ALEKS in their six-week Summer Bridge programs, which are designed to prepare selected first-time freshmen and Educational Opportunity Program (EOP) admits for the challenges of a four-year university. Both campuses report having achieved impressive results with ALEKS; approximately 80 percent of the students who enroll in these summer programs successfully complete the ELM requirement before fall classes begin. CSU Bakersfield also uses ALEKS in its four-week intensive summer program targeting incoming freshmen who did not pass the ELM.

Looking to the Future

Most survey respondents expressed cautious optimism about the future of developmental/remedial education in the CSU. In large part, this optimism appeared rooted in a determination to persist in identifying effective ways to prepare incoming freshmen for baccalaureate-level work. Ongoing assessment of student learning that results from different approaches can be particularly helpful. Many respondents mentioned how failed approaches at remediating students that were reconfigured and tried anew often produced better results. Several respondents described how the effort to identify effective approaches resulted in reaching out to colleagues across their campuses and across the CSU.

Such observations reflect a laudable determination to continue the mission of the California State University to serve with high quality the top third of graduates from California public high schools. Plainly, such commitment needs to be joined with sharp and insightful assessment of approaches, on which strong and successful practices can be built, and weaker and less-successful practices discarded.

Conclusions and Recommendations

The California State University has taken innovative steps to reduce the need for remediation in English and mathematics at the college level. At the system level, the CSU's work with California public schools in particular, with its focus on curriculum alignment and intervention efforts, has been hailed as a national model. Requests from other states for further information about the CSU's Early Assessment Program (EAP) have been frequent.

As prior reports to trustees have made clear, however, efforts to improve the readiness of the state's young people for college and the workforce have produced only modest improvements. These trends underscore the importance of continuing to collaborate with public schools so that more young people will arrive at the CSU ready to do college-level work. They also point to the critical role that CSU campuses continue to play in bringing these fully-admissible students to a level of baccalaureate proficiency. This latter concern—how to best prepare students for college-level work in English and mathematics after they have matriculated at the CSU—was the central focus of the survey administered to the campuses in June 2007. Examples drawn from the survey were discussed in the previous section of this report. More broadly, the results of this survey, in combination with prior reviews of existing programs and practices, suggest that the Board of Trustees may wish to affirm the following guiding principles for programs aimed at bringing admitted CSU students to baccalaureate proficiency:

1. Maintain current commitment to working with California public schools to improve the college-readiness of first-time Freshmen

In considering the CSU's commitment to bringing to proficiency those first-time freshmen who have not yet demonstrated baccalaureate-level readiness in English and/or mathematics, it is important to recognize that, except for a very small number of permitted exceptions, students who are admitted as first-time freshmen are fully admissible based on their record of high school performance. They have met the formal requirements of admission to the CSU, both in terms of coursework completed and academic performance. These students are exactly the population that CSU serves as its central mission.

We should also bear in mind that the CSU's commitment of resources to partner with California's public high schools in both curriculum alignment and intervention efforts is likely ultimately to reduce the number of admissible students who have not yet achieved proficiency. A goal to maximize the proficiency upon entry of students entering the CSU as first time freshmen is worthy and appropriate, and should continue as a viable policy of the Board of Trustees. However, in the face of undeniable realities, the 90% quantification set by the Board in 1996 should be reassessed, and revised as appropriate.

Principle #1. The current goal is consistent with the existing CSU strategic plan. However, as that plan is reviewed and updated, the quantified student proficiency goal should be reassessed, and revised as appropriate.

2. Recognize that there are multiple levels of readiness

CSU freshmen who need remediation demonstrate varying levels of competence. Campuses meet the needs of these students in multiple, often innovative ways. Most campuses assign remedial students to pre-baccalaureate courses based on their scores on the English Placement Test (EPT) and Entry Level Mathematics (ELM) exam. Cut-off scores vary from campus to campus but reflect the same general principle: the lower the exam scores, the more basic the course content and the more intensive the needed remediation efforts. Some campuses place students who very nearly pass the basic skills tests into baccalaureate-level courses, frequently with supplemental assistance. Channel Islands' and Fresno's "directed self placement" systems seem especially promising, in allowing remedial students, with guidance, to place themselves in the first-year writing classes they deem most appropriate to their experience and/or confidence as writers.

There is broad recognition that students whose families are native born, but for whom standard academic English is effectively a second language, face unique challenges in acquiring the basic skills to do college-level work. This includes students whose cultures and communities teach and reinforce "street English" in preference to more standard usages. Several campuses have designed developmental reading and writing courses that more effectively address these students' needs. This would seem to be a much-needed focus for the future. It is also very much worth saying that campuses should be commended for identifying multiple ways to meet students' varying developmental needs.

Principle #2. Campuses should be tasked to assess the effectiveness of their approaches to meeting students' varying developmental needs, and to continue to identify—and share—practices that are found to be particularly effective.

3. Strengthen "early start" programs

Survey results point to the potential value of an "early start" on remediation via a summer experience prior to the initial freshman fall term, especially for first-generation college-goers and students with remedial needs that may require more than an academic year of coursework to overcome. At the same time, it is optimal for students with less significant remedial need to enter their initial fall term without the stigma and need to cover high school material again. Long, intensive summer programs can require foregoing some summer employment earnings,

and the inadequacy of federal and state financial aid is an important barrier. The CSU should engage federal and state policy makers to overcome these problems. Campuses should seek to provide employment to such students and should aggressively seek local and regional businesses and industries to assist with providing jobs to students needing summer employment. As a supplement, system and institutional fundraising could help to support some targeted students. In addition, for quarter campuses, mid-August to mid-September intensive early start programs might avoid the summer employment and financial issues by adding a nontraditional front-end to the traditional fall quarter. With creativity and early notification to incoming freshmen, semester campuses also may be able to craft a nontraditional early start to their fall semester. This may well entail innovations in budget practices, including the provision of dedicated funds for early start programs.

Principle #3. All campuses are encouraged to establish or expand “early start” programs, including strong financial support to include both improved financial aid opportunities and opportunities for summer employment, for students with both significant and moderate remedial needs.

4. Continue to expect completion of remediation before the start of the second year

Campus remediation efforts have yielded remarkably positive results, all considered. As has been reported to the Board in recent years, the overwhelming majority of CSU freshmen needing remediation attain proficiency in English and mathematics by the end of their first year of study. Most encouragingly, *these students are just as likely as students who were fully proficient at entry to earn a bachelor’s degree.* These results provide strong evidence that the CSU is effective both at remediating students within one year and laying the foundation for their future academic success. All in all, the current policy goal, that students be prepared for baccalaureate-level English and mathematics by the start of their second year, is sensible and facilitates academic success.

Principle #4. The CSU should continue to expect freshmen to attain proficiency within one year, especially as students are directed to an energetic early start in the initial summer.

5. Reconsider the redirection to community college of students who don’t complete remediation after one year

Under current policy, students who do not attain proficiency within the first year are disenrolled and redirected to community colleges to complete their remediation. The alarming results of this policy, however, stand in sharp contrast to the encouraging results of remediation efforts sited at CSU campuses. Data from the past five years show a steady decline in the number of disenrolled CSU students who in fact enter community college to complete their remedial education. Many

drop out of higher education altogether rather than take up remedial studies at a community college. Further, those who do enter a community college are simply not returning to the CSU to complete their baccalaureate degrees.

One alternative is for campuses to consider adding additional early warnings in their tracking of remedial students. Students trying but making inadequate progress in their fall term might be directed to more intensive coursework in the winter and spring terms. Students who will clearly fail to complete their remediation by the end of the spring semester could be offered an extra nontraditional month of intensive instruction before the summer begins to complete remediation. With creativity and early warning to students at quarter campuses, a similar end-of-spring boot camp to complete remediation before July may be an alternative that would still allow students two months of summer employment.

Still, community colleges may have a strong role to play in the remediation of students who need this additional time. One promising approach is from San Diego State University, where community colleges offer remedial instruction, but on the university's main campus. This could be an approach especially worth considering for instruction in the summer immediately following a student's initial academic year. And finally, campuses continue to have the authority to permit students who have made progress to proficiency and are very nearly fully college-ready to continue enrollment in a second year under the terms of a performance "contract" with the university. Continued experimentation with such contracts – on an exceptions basis - coupled with energetic assessments seem in order, while we continue the policy of expecting full proficiency before a student can begin a second year of study in the CSU.

In summary, current data strongly suggest that redirecting students who fail to achieve full proficiency across their initial freshman college year from the CSU to Community Colleges has been counterproductive.

Principle #5. Campuses should explore alternatives to redirection to Community Colleges, while maintaining the basic principle that students must achieve proficiency before enrolling in their second year in the CSU.

6. Wherever possible, offer degree credit-bearing work based on outcomes achieved

A more integrative approach to remediation, characterized by the embedding of developmental education into the regular academic curriculum, has gained currency. Consistent with this integrated approach, some CSU campuses are moving away from placing students in pre-curricular (i.e., non-credit bearing) "remedial" courses in reading and writing, and assigning them instead to innovative baccalaureate-level courses. Some campuses have demonstrated that those showing near-proficiency can be placed directly into the college-level English course,

coupled with extra monitoring of adequate progress. Students with more substantial remedial needs have been offered credit-bearing work but within a more intensive experience that both remediates and carries the student through general education proficiency. At the same time, university credit for clearly pre-baccalaureate work is inappropriate, a point that all engaged in the remedial enterprise must continue to bear clearly in mind. Whether in an initial summer or across an initial academic year, this approach can serve two interrelated and equally important objectives: to take away some of the stigma of remediation and, because students will more likely feel that they belong in college, to facilitate their persistence toward graduation.

Principle #6. Campuses should be encouraged to develop, for students who begin their mathematics or English study at a demonstrated “nearly proficient” level, courses that offer baccalaureate credit while requiring enrolled students to meet specific proficiency objectives along with goals for general education.

7. Use technology-assisted approaches where promising and feasible.

Several campuses have turned to new technology and computer-aided instruction in remedial education, especially in mathematics. CSU Fullerton’s online short course for students with a high but (barely) failing score on the ELM has been very successful in getting these students prepared fully for baccalaureate-level mathematics. ALEKS, the web-based mathematics assessment and learning system, has been used extensively and effectively at CSU Fresno and Cal Poly San Luis Obispo. CSU Los Angeles reports that pass rates in remedial mathematics have improved with the use of an online homework package.

These initiatives are congruent with CSU’s Transforming Course Design (TCD) initiative, in which campuses are encouraged to improve student learning via Internet-based learning while simultaneously addressing the issue of instructional costs. Internet-based instruction may increase students’ access to learning, and can easily provide individually- tailored programs. It further provides faculty with critical information on the performance and time spent on study for each student. The CSU has made funding available to support pilot projects that seek to accomplish these goals, and anticipates ramping up the TCD approach very substantially in the next three years.

Principle #7. All campuses are encouraged to develop and use technology-assisted, Internet-based learning programs for remedial English and mathematics. Consortial efforts that involve several campuses in the development of these programs are encouraged.

8. Review and validate the various CSU assessments for placement in English and mathematics

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The CSU is planning a regular review and validation of the English Placement Test (EPT), the Entry-Level Mathematics (ELM) examination, in conjunction with validation studies of the Early Assessments of Readiness for College-Level English and Mathematics (EAP English and EAP Mathematics) and cut-scores on the SAT/ACT, two other methods for establishing exemption from the need to take the EPT and ELM. In light of the campus experiments with direct self-placement and placement in credit-bearing courses, the standard validation and extended research may provide more refined considerations regarding the ranges of student readiness and the interpretations we draw from them.

Principle #8. A review and validation study of the EPT, ELM, and other related instruments (such as EAP, SAT, and ACT) should be undertaken, and the results used to inform campus experimentation with directed self-placement and other innovative remediation placement practice.

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COMMITTEE ON EDUCATIONAL POLICY

Doctor of Education in Educational Leadership—Fall 2007

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Summary

The first seven California State University (CSU) Education Doctorate (Ed.D.) programs in Educational Leadership are now beginning, each having been approved through the rigorous process of the Western Association of Schools and Colleges (WASC). The programs will enroll students in Fall 2007 at: CSU Fresno, CSU Fullerton, CSU Long Beach, CSU Sacramento, CSU San Bernardino, San Diego State University, and San Francisco State University.

The Ed.D. programs beginning at each of these CSU campuses are rigorous, integrating theory, research, and practice around key issues of educational reform. They reflect the commitment in Senate Bill 724 (Chapter 269, Statutes of 2005—Scott) to substantive collaboration with practitioners in program design, candidate selection, delivery of instruction, and program evaluation. They include candidate preparation of a research-based dissertation, but it differs significantly from the traditional doctoral dissertation in that its emphasis is on applying educational research—on analyzing, piloting, and evaluating strategies for significantly improving learning outcomes in the region's P-12 schools and community colleges. The programs are also distinctive in their integrated design and coordinated study of key topics in P-12 and community college education and reform.