

## **AGENDA**

### **COMMITTEE ON EDUCATIONAL POLICY**

**Meeting: 1:45 p.m., Tuesday, May 13, 2008**  
**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 March 11, 2008

#### **Discussion Items**

1. International Programs in the California State University, *Information*
2. California State University Mathematics and Science Teacher Initiative, *Information*
3. Chancellor's Doctoral Incentive Program Update, *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**

**March 11, 2008**

**Members Present**

Herbert L. Carter, Chair  
Carol R. Chandler, Vice Chair  
Roberta Achtenberg, Chair of the Board  
Debra S. Farar  
George G. Gowgani  
William Hauck  
Peter G. Mehas  
Lou Monville  
Charles B. Reed, Chancellor  
Jennifer Reimer  
Craig R. Smith

**Approval of Minutes**

The minutes of January 22-23, 2008 were approved by consent as submitted. Chair Carter recognized that several resolutions from Academic Senate CSU have been received, read, and appreciated.

**Academic Planning and Program Review**

This action item, presented by Executive Vice Chancellor and Chief Academic Officer, Gary Reichard, summarized the California State University academic planning process through six areas of academic planning activity that took place over the last year as well as WASC accreditation activities. The committee unanimously recommended approval by the board of the proposed resolution to approve additions and modifications to the Academic Master Plan As described in Attachment A: Campus Academic Plans (REP 03-08-03).

**Proposed Revision to Title 5 Relative to Graduate and Post-Baccalaureate Admission Criteria**

Presented for information by Executive Vice Chancellor and Chief Academic Officer Gary W. Reichard and General Counsel Christine Helwick, this item proposed a revision to Title 5 relative to the criteria that qualify applicants for admission as a post-baccalaureate or graduate

student. It is anticipated that after public comments are heard, documented, and considered, an action item for Title 5 changes will be presented at the May 2008 Trustees meeting.

**Faculty-Student Research and Mentorship, Special Focus: Health Sciences**

Through brief testimony by campus groups engaged in health sciences research at San Diego State University and California State University, Sacramento, these presentations for information to the Committee by Assistant Vice Chancellor for Research Initiatives and Partnership, Elizabeth Ambos, Greg Talavera, Associate Professor, Graduate School of Public Health (SDSU), Laureen O'Hanlon, Professor and Chair, Department of Speech, Pathology and Audiology, (CSUS), and their respective guests, underscored the critical connections between faculty and student scholarly activity, mentoring, community service, and professional success.

Chair Carter adjourned the Committee on Educational Policy.

## **EDUCATIONAL POLICY COMMITTEE**

### **International Programs in the California State University**

#### **Presentation By:**

Gary W. Reichard  
Executive Vice Chancellor  
and Chief Academic Officer

#### **Summary**

Recent reports have highlighted the need for graduates who have the knowledge, skills and competencies necessary to compete in the 21<sup>st</sup> century. Through policies like the one creating “International Education Week” and programs such as the Fulbright Awards, the U.S. government supports and encourages international activity in higher education. The California State University also has a long history of providing opportunities whereby students may achieve international competencies through activities both here in California and study opportunities abroad. The mission statement of the CSU provides direction in its vision that the CSU should “prepare students for an international, multi-cultural society,” and “promote understanding and appreciation of the peoples, natural environment, cultures, economies, and diversity of the world.” Additionally, the draft *Access to Excellence* strategic plan that the Board is considering for adoption contains this important observation: “Across the coming decade, strong and effective programs to build global awareness need to be replicated throughout the system. Accordingly, the CSU will support faculty work that internationalizes curricula and the experiences of students and faculty alike.”

Internationalization and the competencies in our students that it is intended to produce are features of many programs across the CSU. Internationalization that is embedded in local curricula and co-curricular programs is critical, inasmuch as most CSU students do not, in fact, study abroad. At the same time, student mobility, in the form of international students studying at CSU campuses, and CSU students engaging in study abroad programs of both long and short duration, are among the most visible and familiar elements in a multifaceted strategy to provide international competencies to our students.

Study abroad programs enrich students’ degree objectives. In the CSU, study abroad programs take place at the campus level, and a year-long study abroad experience that is available to students from all CSU campuses is coordinated and administered at the Chancellor’s Office. Most CSU campuses have well-established international education offices that coordinate and administer exchange activity for the campus. These programs include exchanges with

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universities abroad, faculty-led study programs sited in countries around the world, and travel-study opportunities through self- support (extended and continuing education) programs. In all cases, programs undergo a normal development process, feature academic offerings that are congruent with faculty judgments about strong curriculum, offer courses that satisfy graduation requirements, and include a plan for review and evaluation. The safety and well-being of our students is also a primary concern. Accordingly, programs must also comply with CSU policies on risk management and air travel, and must follow the direction of U.S. State Department Travel Warnings.

In sum, strategies for preparing students for lives and work in this most international of all centuries begin with the traditional year-long study abroad, extend to campus programs for academic experiences abroad of less than full-year duration, include the welcome to international students that all CSU campuses provide, and find critical expression in the everyday classroom and laboratory work that students undertake in pursuit of their academic degrees. Responding to CSU's mission, vision and strategic plan, the California State University needs all of these strategies, and will require still more, as global challenges and opportunities burgeon in years ahead.

**COMMITTEE ON EDUCATIONAL POLICY**

**California State University Mathematics and Science Teacher Initiative**

**Presentation By:**

Gary W. Reichard  
Executive Vice Chancellor  
and Chief Academic Officer

Beverly Young  
Assistant Vice Chancellor  
Academic Affairs

Warren Baker  
President  
California Polytechnic State University, San Luis Obispo

**Background**

It is estimated that California will need 33,000 new mathematics and science teachers over the next decade. It is particularly difficult for low-income schools to recruit and retain qualified teachers in these fields.

To address the need for additional mathematics and science teachers, Chancellor Charles B. Reed made a commitment three years ago that the California State University would double its production from a baseline of 750 in 2003 to a figure of 1,500 by 2010. In the first three years of the Mathematics and Science Teacher Initiative, CSU has increased its overall production by approximately 68%, to 1,289. It has increased its recommendation of mathematics teachers by 124%, taking advantage of the new Foundational Level Credential for middle school teachers. It has increased its production of science teachers by 20%, with particularly large gains in chemistry—an increase of 62%.

CSU campuses have been highly effective in acquiring federal grants as part of the Initiative. For example, 16 campuses have now received National Science Foundation *Robert Noyce Teacher Scholarship Program* grants totaling over \$7 million. More than 200 math and science majors interested in teaching currently receive \$10,000 Noyce fellowships for up to two years to support their upper division and credential study.

## **Distinctive CSU Recruitment and Preparation Strategies Focused on Quality**

The CSU strategy has been characterized since its inception on recruiting outstanding candidates and ensuring quality of preparation. A key objective of the first three years of the initiative has been to identify successful approaches that could be scaled up to achieve large and sustained impacts. Campuses undertook six types of strategies:

- ***Comprehensive recruitment aimed at expanding and diversifying pools of candidates.*** Broad outreach has been conducted among undergraduates, second field teachers, and mid-career professionals in science and technology fields.
- ***Establishment of new credential pathways providing multiple points of entry into mathematics and science teaching.*** New programs have been established that blend undergraduate and credential preparation, and middle school Foundational Level credential programs in mathematics have been created.
- ***Financial support and incentives to make teacher preparation financially viable for students of all backgrounds.*** Federal and state scholarship and loan assumption programs and paid tutoring and internship opportunities have been made available to candidates. California's Assumption Program of Loans for Education (APLE), which provides up to \$19,000 in loan cancellation for future teachers in these fields, has been a priority of the Chancellor, and Presidents have been strong allies in ensuring its full utilization. During the past three years, CSU campuses have awarded over \$100 million in APLE awards, and the funds have been directly associated with increases in math and science teacher production. This is consistent with research that shows that student debt deters students—even those who have solid aspirations to teach—from pursuing teaching careers.
- ***Offering internet-supported instruction.*** Support has been provided for content knowledge preparation required for the California Subject Examination for Teachers (CSET). In addition, Internet delivery of instruction has been developed to augment site-based preparation for individuals transitioning to teaching.
- ***Collaboration with community colleges.*** Aligned two- to four-year programs of study have been established that represent an articulated and continuous sequence of preparation for mathematics and science teaching. Lower division transfer patterns have been developed that meet systemwide requirements and provide consistency across community college and CSU campuses within a region.

- ***Partnerships with federal laboratories and industry.*** Programs have been developed that create opportunities for future science and mathematics teachers to engage in paid summer research experiences at federal laboratories.

### **Long-Term Strategic Plan for Sustaining Initiative**

Based on the successful approaches taken during the past three years, a long-term systemwide plan for sustaining increased preparation of math and science teachers is being put in place. The plan reflects the strategic vision set forth by President Warren Baker through his leadership of initiatives with the Business Higher Education Forum.<sup>1</sup>

The CSU long-term plan being led by President Baker focuses on fundamentally re-inventing teaching in these fields and creating incentives for recruitment and retention by:

- Increasing the prestige, distinction, and compensation of careers in mathematics and science teaching;
- Enabling new teachers in these fields to be part of the community of science and to engage in scientific inquiry on a continuous basis;
- Preparing new teachers to utilize inquiry-based instructional approaches that increase motivation, learning and interest of K-12 students in the range of STEM (science, technology, engineering and mathematics) fields.

### **Conclusion**

The CSU is on a trajectory to at least double its production of mathematics and science teachers. The system's efforts have been recognized by the National Association of State Universities and Land Grant Colleges (NASULGC), the National Association of System Heads (NASH), and the American Association of Colleges of Teacher Education (AACTE) as among the most significant in the nation. The CSU Initiative has substantial long-term promise for recruiting and retaining new teachers in math and science particularly because it is aimed at creating a prestigious professional role in which these teachers are active members of both the scientific and teaching communities.

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<sup>1</sup> The Business-Higher Education Forum reports include: *A Commitment to America's Future: Responding to the Crisis in Mathematics and Science Education* (2005) and *An American Imperative: Transforming the Recruitment, Retention, and Renewal of Our Nation's Mathematics and Science Teaching Workforce* (2007).

## **COMMITTEE ON EDUCATIONAL POLICY**

### **Chancellor's Doctoral Incentive Program Update**

#### **Presentation By:**

Gail Brooks  
Interim Vice Chancellor  
Human Resources

Margaret Merryfield  
Senior Director  
Academic Human Resources

Robin Marion  
Director, Chancellor's Doctoral Incentive Program  
Associate Professor of Teaching and Learning  
California State University, San Marcos

#### **Summary**

The CSU Chancellor's Doctoral Incentive Program is designed to increase the pool of individuals with the qualifications, motivations, and skills to teach the diverse student body of the California State University. It provides financial assistance in the form of student loans to select individuals pursuing doctoral degrees who are interested in applying and competing for CSU instructional faculty positions after completion of the doctorate. As such, it supports the second commitment by the CSU identified in the current draft of Access to Excellence, "Plan for faculty turnover and invest in faculty excellence."

This report will provide a brief history and description of the Chancellor's Doctoral Incentive Program (CDIP) as well as program outcomes with a focus on individuals who completed the program and subsequently became faculty members at California State University campuses. Program director Dr. Robin Marion will describe current strategies to enhance the profile of the program and its participants, strengthen quality, and provide professional development opportunities to ready participants for faculty positions.

#### **Background and Program Description**

The Chancellor's Doctoral Incentive Program emerged from a 1985 proposal from two CSU Presidents, Dr. James Rosser of California State University, Los Angeles, and Dr. Stephen Horn, former President of California State University, Long Beach. Dr. Robert Suzuki, who later became President of California State Polytechnic University, Pomona, was also instrumental in

its formation. Following approval by the Board of Trustees, the program began in 1987 as the CSU Forgivable Loan Program. Its purpose was to enhance the quality of the CSU by promoting the diversity of the faculty. While the program originally focused on individuals from under-represented groups, that criterion was dropped in 1999.

The program now considers two factors in selecting participants. The first is the candidate's *potential as a doctoral student* interested in teaching a diverse student population, as determined by his/her academic record and professional qualifications, the quality of the proposed doctoral program, the applicant's relevant background, experience, skills, and motivation for educating the diverse student body in the CSU, and the presence of a Collaborative Plan of Support with a CSU tenure-track faculty member who agrees to provide professional mentoring and other support to enhance the student's academic experience. The second criterion is the *academic discipline*, with preference given to proposed areas of study that represent areas where CSU campuses anticipate the greatest difficulty in filling future faculty positions.

Program participants are eligible for loans of up to \$10,000 per year, to a maximum of \$30,000 over a five-year period. Participants must repay the loan beginning one year after completion of the doctorate or withdrawal from the graduate program; the current interest rate is 5%. If the recipient is hired into a full-time instructional faculty position in the CSU, the loan is cancelled at a rate of 20% of the principal, plus interest, for each year of full-time teaching in the CSU. If the individual obtains faculty employment on at least a half time basis, he/she may qualify for forgiveness of 10% of the principal plus interest per year. All amounts cancelled or "forgiven," including interest, are reported as income to the IRS, and federal income and social security taxes are withheld on that amount.

From its inception in 1987 through August of 2007, 1,628 individuals have received a combined \$38.5 million in loans through the program. Of these recipients, 880 (54%) had completed the doctorate, and 60% of those (530) had successfully obtained employment as instructional faculty members in the CSU. Of students who have not completed a doctorate, roughly half are still active and making progress in doctoral programs.

The following table indicates the gender and ethnicity of program applicants, award recipients, individuals who completed the doctoral degree, and individuals who obtained CSU faculty employment, through 2005-06.

**Table 1. Gender and Ethnicity Profile of CDIP Participants**

	% Female*	% Non-White*
Applicants	70	63
Recipients	67	69
Received doctorate	69	72
CSU faculty	70	70

\*% of those reporting their gender and ethnicity.

By comparison, according to the fall 2006 CSU employee profile, 43% of all full-time faculty members were female, while 27% were non-white.

Program participants come from nearly every academic area, with the largest group of doctoral recipients from education (38%) followed by the social sciences (23%). In recent years the selection process has placed considerable weight on identifying candidates in fields where the anticipated need for faculty is especially high; for example, eight of the 85 individuals who were successful in this year's selection cycle come from nursing, one of the areas where campuses report the greatest difficulty in recruiting faculty with doctorates. Based on an agreement with the California Faculty Association, approximately one fourth of awards are expected to be made to individuals who have held positions represented by the CFA within the last two years. For the group selected in the current cycle, it appears that 36% are currently CSU lecturers.

Every campus in the system now employs, or has employed, program participants who received the doctorate. Of these faculty members, close to two-thirds hold or have held tenure-track positions. As of 2005-06, CSU Sacramento employed the largest contingent of CDIP recipients (56), followed by 41 faculty members employed by San Francisco State University.

In 2007, as part of an effort to enhance the visibility and stature of the program, Dr. Robin Marion, Associate Professor of Teaching and Learning at California State University, San Marcos, was hired as the first Faculty Director of the Chancellor's Doctoral Incentive Program. Dr. Marion is a former CDIP recipient who completed her doctorate at the University of Wisconsin-Madison. She is focusing her attention on three areas: (1) Increasing the profile of the program and its participants, through outreach on CSU campuses and with top doctoral programs; (2) Enhancing the quality and quantity of applications, through recruitment activities, sharing of best practices from the most successful campuses, and increased communication with campus coordinators; and (3) increasing opportunities for professional development among program recipients, as well as strengthening linkages to their CSU mentors and campuses, in order to better prepare recipients to successfully compete for tenure-track positions in the CSU.