

## **FACE-TO-FACE AND CYBERSPACE**

*A Project to Expand Collaboration among*

*Mathematics Education Faculty of the California State University*

**Funded by the Institute for Teaching and Learning, California State University**

**2001-2002**

**Program:** Mathematics Education

**Focus:** Mathematics preparation programs for prospective teachers

### **Project**

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**Funds granted : \$19,000**

### **Funds and in-kind support committed from other sources:**

- \$6406 (In kind release from CMP and Chico State...( + benefits)
- \$5700 Transportation costs borne by participating CSU campuses
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**Date:** June 27, 2002

## ***Prologue***

In May 2001, the CSU Chancellor's Office co-sponsored a unique and powerful conference for mathematics and science educators from the CSUs to showcase CSU-Fresno's newly-developed and revised mathematics and science courses for Liberal Studies majors, and to foster dialogue among mathematics and science educators from the CSU system. During one of the breakout sessions for mathematics educators the mathematics coordinator for Fresno Unified School District noted that there were numerous opportunities available to K-12 mathematics teachers for professional development. "Where," she asked, "did most CSU mathematics education faculty go for *their* professional development?"

This simple question was initially met with silence, which powerfully demonstrated the lack of opportunities that CSU mathematics educators have for purposeful, creative, and substantive professional conversations to develop a "collective intelligence" about all aspects of pre-service and in-service mathematics education.

## ***The Problem: Need for CSU mathematics education faculty to collaborate on issues of common concern***

The California Commission of Teacher Credentialing (CCTC) issued a new set of guidelines specifying the requirements for mathematics content and methods courses offered to prospective elementary teachers and will shortly issue a similar set of guidelines for courses offered to prospective high school teachers. Each of the CSU campuses will need to assess and revise their courses in alignment with the new requirements. As we seek to meet the forthcoming changes we will continue to reflect on related issues in enhancing the mathematical preparation of teachers. Mathematics education faculty (in both mathematics and education departments) of the CSU can benefit from sharing their knowledge and experiences. At present, despite working on common issues, there has been little opportunity for system-wide collaboration among this group.

Further, most CSU campuses currently have an increasing number of junior mathematics education faculty as a result of both growing demand and the retirement of senior faculty. The opportunity for these junior faculty to meet and discuss issues of common concern with colleagues from other campuses would enhance long-term system-wide cooperation in improving mathematics education in California.

### ***The Plan: Initiate activities for “Face-to Face and Cyberspace” collaboration***

In this proposal we sought funding for a two-day retreat and for developing a web-site. The focus was to:

- discuss the proposed changes in the CCTC guidelines in relationship to current programs offered on each campus. Particular emphasis will be on sharing best practices and insights based on our different experiences
- develop a web site that would serve as a clearinghouse, resource place, and dialogue center for instructors of mathematics methods courses and mathematics content courses for prospective teachers.
- encourage the active participation of junior faculty at the proposed face-to-face meeting and in the cyberspace component.

### ***Face-to-Face Retreat Report***

The retreat for mathematics education faculty from departments of mathematics and teacher education was held April 10 – 12 at the Asilomar Conference Grounds in Pacific Grove. We extended invitations to all CSU Departments of Mathematics and Colleges of Education to send faculty members involved in the mathematical preparation of future teachers. We requested that departments pay for the transportation costs of their participants. We were able to accommodate all 55 faculty from 19 campuses who wanted to participate; many faculty doubled up in the housing and some stayed off-grounds at their own expense.(see *F2F database*, a separate file).

Faculty members Rapti de Silva (Chair), Chico, Rajee Amarasinghe, Fresno, Jorgen Berglund, Bakersfield, Brian Lim, Sacramento, and Julie Sliva, San Jose, served on the planning committee Together with co-directors Ross and Bohlin, they put together a program to prepare for the CCTC guidelines’ impact on our programs and for the continued collaboration of CSU mathematics education faculty. The committee organized the logistics of the meeting and designed a program in which participants

- led the others in some team-building activities
- facilitate/led sessions where the best practices that already address the new guidelines are discussed, including programs that blend mathematical content and pedagogical learning

- brought detailed handouts describing their programs (e.g., information regarding curriculum, courses, assessment, resources for teaching/learning, and texts used) for the mathematical preparation of pre-service teachers.

Keynote speakers were Betsy Kean of the California Commission on Teaching Credentialing, and Randy Philipp of CSU San Diego. For a copy of the retreat program, see the file “F2F& C *retreat agenda.*”

### **Cyberspace component report**

During the last session of the retreat, Carol Bohlin (Fresno) shared an outline for the web-based **CSU Mathematics Education Resource Center** (CSU-MERC) <http://csufresno.edu/mathed/> and the Blackboard-based **CSU Mathematics Educator Forum** (MEF) <http://blackboard.csufresno.edu>. Participants were excited about the potential of these. At the conclusion of the retreat, participants expressed a strong desire to continue the conversations online. A desire for current information impacting California mathematics educators was also expressed. As a result, a listserv for all CSU mathematics educators was created: **CSUME@csufresno.edu**, and all CSU mathematics educators who are in our database were added to the **COMET** distribution list.

For additional details, see the file titled *Cyberspace Report.*

### ***Summary***

Fifty five CSU mathematics education faculty met on April 10 – 12 to discuss the proposed changes in the CCTC guidelines in relationship to current programs offered on each campus. (See photo in separate file.) Particular emphasis was on sharing best practices and insights based on our different experiences. We are excited about the results of this project. In the words of one participant:

*It was one of the most significant meetings I've attended. We are each so busy attempting to be creative and meet the many requests for programs, courses, and institutes, we seldom take time to look around. Through the sessions and conversations I gained more ideas than I thought possible.*

A long-term goal of this project is to hold annual face-to-face meetings, perhaps in conjunction with a key statewide meeting/conference (e.g., California Mathematics Council). In fact, we have been in correspondence with a member of the CSULB faculty

who would like to host a similar conference for CSU math educators at his campus next year. We hope that the Chancellor's Office would like to continue supporting both the Face-to-Face and the Cyberspace portion of this venture. We will continue to invite all CSU sites to collaborate and participate and involve mathematics content and pedagogy instructors. As with the initial retreat in April 2002, we hope to hold timely issue-oriented discussions and identify and share best practices. Sharon Ross and Carol Bohlin will give a presentation ("Statewide Networks for Mathematics Educators") on the entire project at the National Council of Teachers of Mathematics conference next April in San Antonio.

The in-place cyberspace components can now serve as clearinghouse, resource place, and dialogue center for instructors of mathematics methods courses and mathematics content courses for prospective teachers. This program, designed to strengthen active, collegial interaction among CSU mathematics education faculty, will result in a vibrant statewide community of learners and scholars. Carol is presenting on the Cyberspace component of the project with her CSU-Fresno colleague Rajee Amarasinghe at the California Mathematics Council's Annual Meeting at Asilomar this December ("MERC--The Mathematics Education Resource Center for CSU Math Educators").

Our graduate assistant has prepared a separate document which summarizes 1) the data from participants which addresses their perceptions of the value of the project and 2) the project activities over the seven month period. See the separate file, *F2F Participant Evaluations*.

<b>Budget</b>	<b>ITL</b>	<b>MATCH</b>
Salaries		
Coordinators Release Time one unit, spring semester 2002 Bohlin (from CSUF Mathematics Project)		\$ 2,457
Ross (from CSU, Chico Math Department)		\$ 2,457
Planning Committee Chair , de Silva (from CSU, Chico) one unit, spring semester 2002		\$ 1,492
Stipend for Planning Committee members 5 @ \$600	\$ 3,000	
Graduate Student Assistants	\$ 620	
Retreat food/lodging/meeting rooms for 35 faculty members & 3 graduate student assistants @ \$314	\$11400	
Travel to retreat       38 x \$150		\$ 5,700
Consultants for web site development	\$ 3500	
Materials & Supplies		\$ 1,100
Printing	\$ 400	\$ 1,000
Mailing	\$ 80	\$ 100
<b>Total</b>	<b>\$ 19 000</b>	<b>\$14 306</b>

### **Actual Expenditures**

Asilomar Contract	11284
student assistant	211
stipends for planning committee	3 700
SBC (pac bell) for on-line service to Asilomarconference room	81
office supplies	99
invoice to Fresno for cyberspace component	3625
<b>TOTAL</b>	<b>19 000</b>