

What we have to offer:

Teachers As Learners:

- Problem solving will be taught using questioning techniques and challenges participants to ask themselves, "Does a pattern exist?", "How can we be sure?", and "Why does that work?"
- During grade-level "Have/Want" sessions, participants identify connections between standards by using concepts the students HAVE to develop a mathematical breadcrumb path to bridge to what they WANT students to know.
- Teachers from school teams learn a positive structure of dialogue about teaching to develop deeper collegial interactions

Building Reflective Practice:

- A daily debrief of the problem solving lesson leads to a discussion dissecting the questions and techniques used by the instructors. Staff-observers will highlight the different purposes for the questions used and model peer coaching.
- Participants reflect upon their own classroom practices in light of their experiences as learners.
- Videos of K-12 classroom instruction are used to slow down the process of teaching-participants analyze student-teacher interactions and teaching decisions.

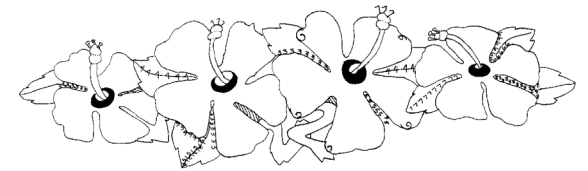
Developing Tools for Teaching:

- Aspects of teaching which are modeled and discussed include: methods of engaging all (especially the unengaged); building classroom safety; checking for understanding; spreading understanding from one student to all; dealing with wrong answers; pushing the depth of the lesson; and pacing the lesson.
- Participants will analyze their own curricula, finding best ways to utilize it in order to assist students in making connections, thus building upon previous ideas rather than adding to the list of what is to be known.

You will also be invited to follow-up activities throughout the school year.

The CSUS Mathematics Project will...

- provide 3 weeks of professional development from June 26 - July 13, 2006;
- provide Saturday Follow-Up Meetings at CSUS open to past participants and guests;
- provide on-site follow-up during the following academic year which could include activities such as:
 - facilitating collaboration while creating lessons;
 - observing classroom instruction;
 - teaching demonstration lessons;
 - facilitating debriefing discussions following lessons; and;
- study student data collected by teachers/school to determine the impact of the content and structure of our summer institute and follow-up program upon students.



*California State University, Sacramento
Mathematics Project*

CSUSMP

2006 Invitational Summer Institute for K-12 Teachers of Mathematics

**"Techniques for Building Students'
Abilities to Make Mathematical
Connections in the Standards"**

June 26 - July 13, 2006

- See Questioning Strategies Modeled
- See Peer Coaching Modeled
- Develop Tools for Teaching
- Participate as a Learner
- Build New Collegial Relationships

CSUS Mathematics Project is a part of:

The Center for Math & Science Education at
California State University, Sacramento



and is a regional site of the State-wide

California **M**athematics **P**roject

Important Details

Location: CSU, Sacramento

Dates: June 26 - July 13, 2006
(except July 3 & 4)

Time: 8:30 am - 4:30 pm

Registration Fee: \$1200
(Use SIP funds, AB 466
Follow-Up Funds, Prof.
Development Monies)

Units: 8 continuing education units
in math available for \$350

**Applications currently being
accepted!**

We Are Seeking Applicants Who...

- are enthusiastic and reflective teachers of math at any level (K-12)
- are desiring to enhance their knowledge of math for use in their classroom
- are interested in building mathematical reasoning into their lessons
- want to examine questioning strategies
- are interested in working with their school colleagues in collaborative lesson design, lesson study, or peer coaching

What Past Participants Are Saying:

"It stretched me as a learner and got me excited again about learning and teaching. I also gained a ton of knowledge about math and how it interrelates."
-Daly Casserly, 2nd grade teacher, Rancho Cordova Elementary School

"I was especially interested in the techniques that will help me to overcome a child's possible lack of previous training. ... I was so exceptionally pleased by the institute's attention to this circumstance."
- Miki O'Toole, 5th grade teacher; Caleb Greenwood Elementary

"I came away with so much more than a better understanding of the math. A better sense of how to build a rich classroom culture to promote the desire to learn. This should be a required course for all teaching majors."
- Ginger Black, middle school teacher, Toby Johnson Middle School

"This course was fantastic! The instruction is the finest I have had since I completed my undergrad. I learned the math content by consistent, thoughtful questioning from the staff. I learned how to become a better teacher by experiencing, debriefing, and reflecting upon the teaching of the course."
- Ruth Fender, high school teacher, Florin High School

"This course goes far beyond the expectation of a continuing education or in-service. Not only does it provide powerful conceptual knowledge of math, it also models and emphasizes the highest qualities of the teaching profession."
-Terry Minton, 6th grade teacher, Deterding Elementary School

"This course reminded me of why I wanted to become a teacher, hands-on, exploratory learning fosters deeper understanding in all of our students."
-Myra Licon, middle school teacher, California Middle School

Interested but concerned about obtaining school or district funding for registration fee?

Contact, Debbie Stetson, Director (916)
278-5957 or Stetson@csus.edu

The Application Process

Phase 1

Fill out & send in the application form by April 5. (Reg. fee due by July 13)

Phase 2

We will mail you forms for Letters of Recommendation & Indication of District Support. Also

Phase 3

Debbie Stetson will conduct telephone interviews. She will ask you to describe your hopes for the institute, to describe a typical day in your mathematics classroom, and explain what you can expect from the institute. The application asks you to provide the best time to contact you.

Phase 4

You will be contacted to let you know if we have room to accommodate you in this summer's institute.

Following the institute, school teams will participate in a study on the effect of the Institute on State test scores & be eligible for special on-site follow-up workshops.

**(Please note that due to the reduction
in State funding, our institute is
contingent upon full enrollment).**