

Los Medanos College
Program Improvement and Development Process
Proposal Form
2008-2009

11

Project Title: Math Department Equity Reading & Research Group

Unit or Team: Mathematics

Contact Person: Mara Landers, A'kilah Moore, Julie Von Bergen

Overview of Proposal

Scope of Project

What is the project that you are proposing to be pursued next fiscal year? Include the following in your response: (1) A description of the project as developed in your department/team's program review and planning document or annual update and how the project will support College Goals; (2) Any research data (qualitative or quantitative) that supports the need for this project to be pursued; and (3) A discussion of the desired outcomes of the project.

The math department faculty propose a reading and research group to discuss pedagogy for creating a more equitable learning environment. We will specifically read about both the theories of best practice and investigate successful practices and programs at other colleges and universities. We plan to discuss creating change at the individual classroom level as well as at the program level.

We believe this discussion environment and faculty-initiated group will begin to address the needs of under-represented students who have low success rates in math. While we believe the teaching communities provide a valuable and necessary curriculum-based course mentorship, we would like a venue in which to have deeper, social justice specific conversations from a pedagogical but not course specific perspective.

We believe inviting one or two guest speakers with social justice for mathematics research experience and practice will provide us with knowledge and insight that cannot be gained from reading alone. Specifically, we would like to invite Eric (Rico) Gutstein (Professor, University of Illinois at Chicago), Danny Martin (Professor, University of Illinois at Chicago), Alan Schoenfeld (Professor, University of California at Berkeley) and Brock Klein (.XL and Math Jam Director, Co-Director TLC, Pasadena City College).

Reading and discussing research on diversity and equity issues in mathematics education will inform our practice on many levels. We may examine curricular innovations or pedagogical techniques, but we may also read about student-teacher relationships, classroom and school communities, student identity, and

more. All of this work will help us better support our students in their learning, motivation, and perseverance in math. In terms of specific SLOs, reading about curricular innovations and pedagogical techniques connects directly to problem solving, multiple representations, and communication SLOS. Looking at other kinds of research, such as work on identity, motivation, or community, will help us better support students in becoming effective learners.

The proposed project is not directly connected to IDEA or the FIN projects. It is an autonomous program planned and implemented by Math department faculty. We are proposing a math-focused, grassroots effort to start a discussion surrounding equity in the Math curriculum. While there is much existing research on educational equity in general, there is also a large body of research specifically focused on equity in math education, and this work is our focus.

In our Fall 2008 Program Review we stated we would "Establish venues for faculty to discuss the implications of pertinent research in math education; Review current research on best practices in teaching and learning". This proposal is in direct relationship to this department goal.

This request satisfies college goal #2 by specifically discussing and exploring creation of a more equitable environment for students within the math program. Instead of proposing institutional changes, we are proposing a base-upward model of implementing change.

This request satisfies college goal #5 through creating an environment for innovative discussion, allows for inclusion of faculty from all disciplines and supports collaborative discussions and planning.

This request satisfies college goal #6 by establishing a group to support current individual efforts to research, plan and improve.

Budget

We would like to money to invite guest speakers who are experts in the field of math equity to come to our campus. Also included is money for various books and professional development materials specific to math equity, including membership to related publications and professional organizations. Funding is desired to buy books to sustain a small reading library and invite guest speakers. We believe having a library of math education books on hand in the adjunct office for faculty to expose themselves to new ideas and discuss will have better results than the current, ineffective practice for faculty to purchase books on their own at the recommendation of colleagues. This budget request is for one year.

Line Item Budget

Supplies	<u>\$500</u>
Consultants (flight and lodging)	<u>\$3500</u>

Total Budget Request

\$4000

Appropriate Manager's Signature: *[Handwritten Signature]*