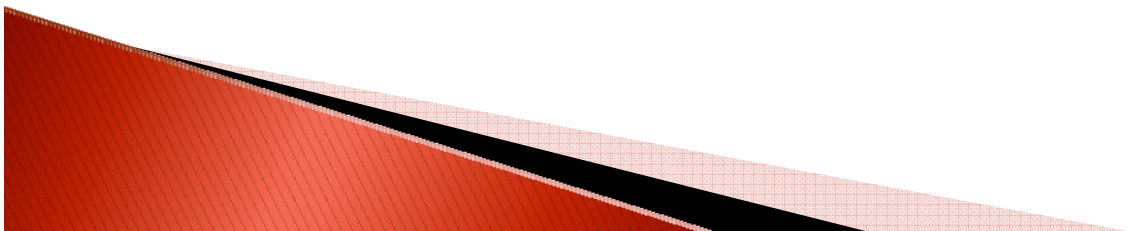


Ohio Mathematics and Science Coalition

“Quantitative Literacy from an Education
Perspective”

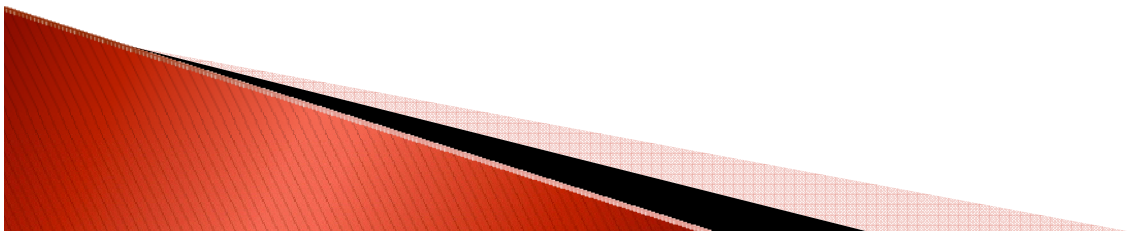
Honey Kirk
Palo Alto College
San Antonio, Texas





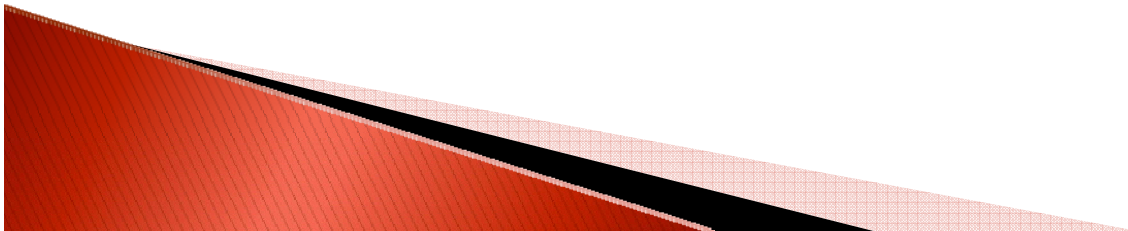
Mathematics Across the Community College Curriculum

- ▶ A little history
- ▶ AMATYC institutes
- ▶ Disciplines & modes of integration
- ▶ Results
- ▶ In their own words . . .



A little history

- ▶ Edmonds Community College, Washington
- ▶ NSF Grant “Math Across the Curriculum”
(2000–2004)
- ▶ NSF National Dissemination Grant
(2005–2009)

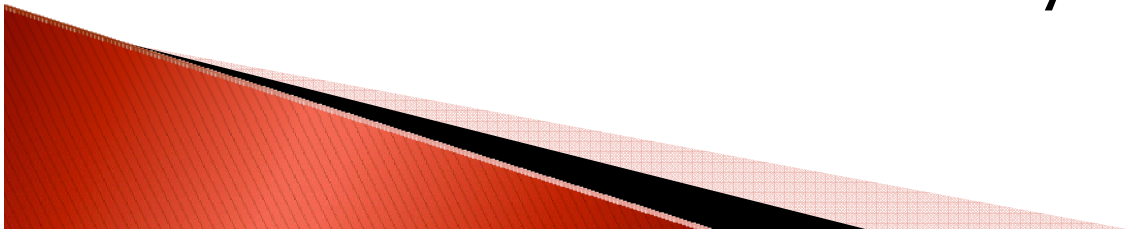




Mathematics Across the Community College Curriculum

Implementation recommendation:
Faculty will integrate quantitative literacy outcomes into all mathematics courses and collaborate with faculty in other disciplines to integrate quantitative literacy into coursework across all disciplines.

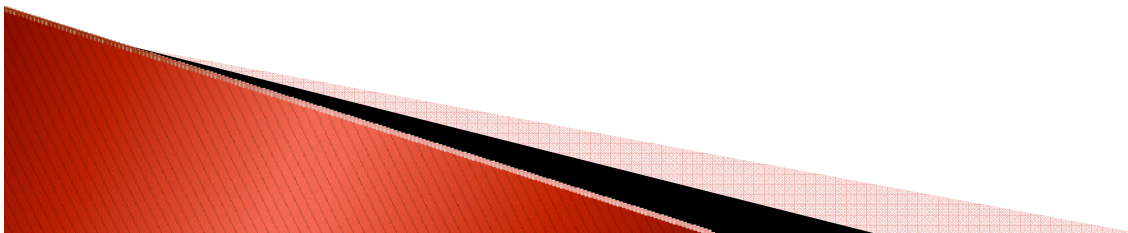
AMATYC Crossroads & Beyond Crossroads





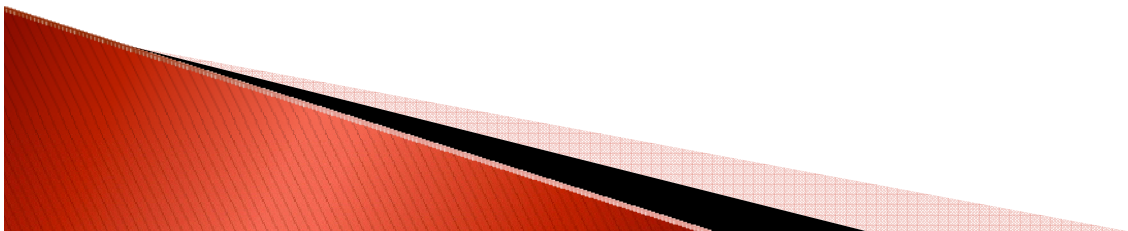
Mathematics Across the Community College Curriculum

MAC³ supports faculty of all disciplines in creating curriculum that enhances the mathematical or quantitative literacy dimensions in their courses.



AMATYC institutes

- ▶ 3 summer and 2 winter institutes
- ▶ 160 community college faculty
- ▶ 59 interdisciplinary teams
- ▶ 36 colleges
- ▶ 19 states



Disciplines

Accounting
Anthropology
Art
Art History
Biology
Business
Career & Technical
Campus-Wide Initiatives
Chemistry
Computer Information Systems
Computer Science
Economics
Education
English
Environmental Science
Ethnic Studies
Ethnomathematics
Geology
Health

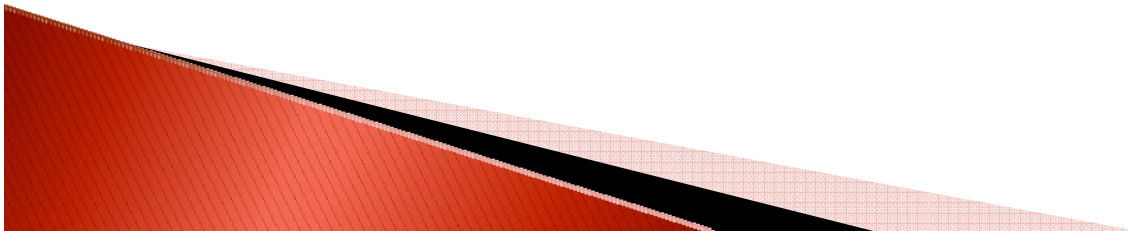
Health & Human Services
History
Humanities
Labor Studies
Mathematics
Nursing
Physics
Policy Studies
Political Science
Psychology
Reading
Sociology
Spanish
Speech
Special Education
Statistics and Data Analysis
Study Skills
Urban Planning

<http://www.mac3.amatyc.org>



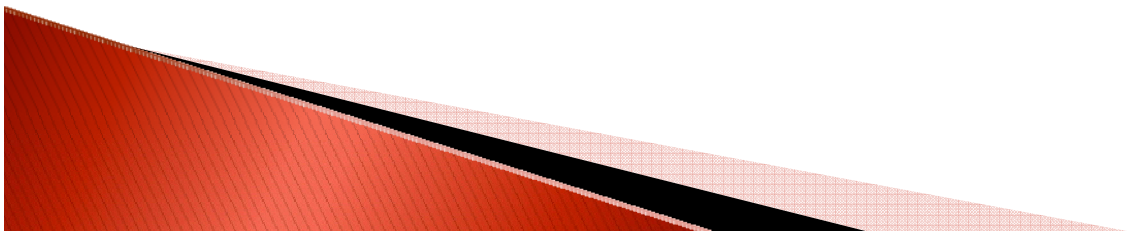
Modes of Integration

- ▶ Projects within a Course
- ▶ Linked Assignments
- ▶ Learning Communities
- ▶ Service Learning Projects
- ▶ Department Wide Projects
- ▶ Institution Wide Projects



Results

- ▶ 850 matched pre–post student surveys
- ▶ Significant gains in 3 of 4 main ideas:
interest/confidence, awareness, interdisciplinary,
(concept)
- ▶ Gains in math skills, according to students:
understand concepts, think through problems,
solve problems, comfort with complex ideas,
confidence, communicate the math, (enthusiasm)



The most important thing I learned is:

“...vocabulary words that I didn't know and now use them in my everyday life.”

“...math is not a bad subject. With constant practice, you can get better, but you have to keep at it.”

“...to never give up.”

