

38th Annual NCSM Conference, St. Louis Missouri

Reflection by David Erickson, Recipient of 2006 the Iris Carl Award

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The mission statement for NCSM speaks to the “international force” of members “to achieve excellence in mathematics education.” Indeed, mathematics education is at a critical stage in its relatively short 100-year history. This spring about the same time as the NCSM conference, President Bush announced a National Mathematics Panel to “empirically evaluate the effectiveness of various approaches to teaching math, creating a research base to improve instructional methods for teachers.” See (<http://www.ed.gov/about/inits/ed/competitiveness/math-now.html> ¶ 3).

This aligns with at least two of the NCSM vision statements:

- offer up-to-date information about research, issues, trends, programs, policy, and practice in mathematics education, and
- collaborate with other stakeholders in the education community, and with business and government to strengthen leadership in mathematics education.

My participation at the 38th Annual NCSM Conference allowed me the opportunity to learn about up-to-date research in mathematics education and to collaborate with other leaders in the field.

On May 15, Secretary of Education Spellings published the list of 17 National Math Panel members (<http://www.ed.gov/news/pressreleases/2006/05/05152006a.html>). Some of these members have little connection to mathematics education; some advocate methods of teaching opposed to the vision of the NCSM. Our organization’s membership is essential in communicating with panel members what we believe, what was shared in numerous sessions at this past conference in St. Louis. For example, Reys, Dingman, Olson, Sutter, Teuscher, Chval, Lappan, Larnell, Newton, Kim, and Kasmer (April, 2006) shared the *Executive Summary Working Draft of the Intended Mathematics Curriculum as Represented in State-Level Curriculum Standards: Consensus or Confusion?* In this report, they state the criticism from the Fordham Foundation (2005) for the over-reliance on calculators, but contradicted this finding through their research in looking at state standards (p. 5). For those National Math Panel members who openly oppose the use of calculators, this finding needs to be explicitly shared. This is our role, to provide the panel members with resources based upon research, not just opinions.

Jeanne M. Joyner and George Bright shared research on helping teachers implement formative assessment as a means of informing instruction. They argue that listening to students is a way to gather, design, and plan for future instruction (c.f., Pellegrino, Chudowsky, & Glaser, 2001). A traditional problem, “What is the area or perimeter of a (given) rectangle,” can be restated, “Without actually computing the area or perimeter of a (given) rectangle, list everything you know that would help you find the area and perimeter.” This focuses the response not on a numerical response, but on a process. We know that \$1 calculators can compute with accuracy, but we need to be listening to our students to encourage explanations on what is necessary to allow the calculator to function. The emphasis nationwide for summative assessments is not the only assessment we want our teachers implementing.

Many NCSM members shared research-based approaches toward a better understanding of mathematics through their presentations at this year’s conference. As a newly elected board member to the Montana Council of Teachers of Mathematics, it is my hope to continue to share through my state organization as well as through my teaching of future and current teachers of mathematics. We can make a difference; we can encourage each other and support excellence in mathematics education. NCSM members are leaders because they take an active role in furthering mathematics education locally, nationally, and internationally.