

**National Association of State Science and Mathematics Coalition
2007 Annual Coalition Directors Meeting
Directors' Forum**

SciMath^{MN} “World Class Math Standards: A Briefing for Minnesota Policymakers

This January SciMathMN held a major briefing for policy makers that explored the status of K-12 mathematics in Minnesota and how a proposed revision of the state academic standards for math would impact the preparedness of the state's graduates and the quality of its workforce.

There were several reasons SciMathMN focused on a math policy briefing.

- A revision of the state math standards was planned for approval by the 2007 state legislature. MN is the only state that places its standards in law. There is no state board of education. It is very important for the legislature to understand standards and important concepts for various content areas.
- Standards approved in 2005 were developed in the midst of a “math war” setting. Many saw them as curriculum items as opposed to standards.
- In 2006 the MN legislature had changed state graduation requirements. In the future all high school graduates must pass Algebra II and all 8th graders must pass Algebra I (components of linear Algebra).
- A committee began working on draft standards in November of 2006 with the intent to take proposed standards to the legislature in February of 2007.
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- MN would again participate as a mini-nation in TIMSS 2007. With SciMathMN funding the state participated as a mini-nation in 1995. The 2006 legislature provided \$500,000 toward the 2007 TIMSS study with businesses contributing an additional \$150,000.

Planning for the briefing began in September. An initial decision was made to invite Bill Schmidt to present a talk on World Class Math Standards. He is a recognized expert on international math standards. He had worked with MN on the 1995 TIMSS study and had name recognition with policy makers.

The planning was complicated by a fall 2006 election that resulted in major changes in the Minnesota Legislature. The Democratic majority in the Senate was strengthened and the House majority changed from Republican to Democratic while a republican governor was reelected.

The particular date for the briefing was chosen after consultation with legislative leaders. With their help SciMathMN scheduled the event early in January, when legislative committees were holding their initial meetings of the session. In fact, the chair of the Senate Education Committee announced that his committee meeting would be attendance at the major briefing.

To give you an understanding of the policymakers briefing in mathematics we have included the following parts to this packet:

1. An agenda of the January 10th Large group Briefing event at the Science Museum of Minnesota. This event drew 35 legislators, 5 staff from the Minnesota Department of Education, 30 educators and members of education advocacy organizations, 30 business persons and business foundation staff, and 20 SciMath^{MN} Board members
2. A schedule of events included in the two-day briefing.
3. A “white paper” commissioned by SciMath^{MN}: *Developing World Class Students through World Class Mathematics Standards: Do Minnesota Standards, Students and Teaching Measure Up?*
4. SciMath^{MN} Contact sheet for further information.

A special thanks to the **New Mexico Partnership for Math and Science Education** for permission to use their poster: *A Sample of Major National Reports on the Math and Science Crisis* as a handout at our briefing!

Here is the schedule of events for the SciMath^{MN} Briefing for Minnesota Policymakers for January 9 & 10, 2007

2:00 – 2:30 TIMSS Discussion with Education Commissioner Alice Seagren taped for future presentation on MN public television channels.

Nancy Nutting, Executive Director, SciMathMN and Mike Lindstrom, Past President, SciMathMN are guests in first half

Jim Bartholomew, Education Issues, Minnesota Business Partnership and Karen Klinzing former legislator and current Associate Commissioner of Education, guest in second half
Tape from Bill Schmidt’s January 10 presentation may be integrated into this taping
Show to be telecast on cable stations at a later date

Legislature passed 2 key pieces of legislation last spring:

1. MN would participate again as a mini-nation in TIMSS 2007 (last time it participated was 1995). The state legislature provided \$500,000 for participation. Businesses contributed an additional \$150,000 to complete the funding.
2. Changed state graduation requirement to all high schools must pass algebra II and all 8th graders pass algebra I (components of linear algebra)

The legislative changes required a revision of state standards, currently underway – one draft, attempting to take the TIMSS message of focus to heart was released in Nov. Committee and Writing Group is working on second draft; out for expert review right now; draft to be released to public again and feedback from groups such as SciMathMN will be sought. Target is to take revised standards to legislature in February. MN is only state that has standards in law as we no longer have a State Board of Education.

Jan. 10-8:00-9:00 Presentation by Bill Schmidt at 3M to employees

As a major scientific corporation headquartered in Minnesota, 3M has a special interest in math and science and employee understanding of the importance of these areas for workforce needs.

Bill Schmidt and Nancy Nutting at 3M; presentation will be taped

Alex Cirillo, 3M Vice President to introduce Bill; arrangements by Barbara Kaufmann

150 participants – use Education in a Global Context PowerPoint + Q/A

Event was videotaped by 3M and is posted on the SciMathMN website

9:00 return to hotel; Nancy pick will up Bill at 10:30

11:00 – Bill and Nancy have private meeting with Rep. Carlos Mariani (D), Room

563, SOB, chair of House E-12 Education Policy Committee (Peter Lindstrom from Minnesota High Tech Association and Doug Carnival, Minnesota High Tech Association lobbyist and initial lawyer for SciMathMN may join us.) (rep from St. Paul)

11:30 – Bill and Nancy have private meeting with Rep. Tom Rukavina (D), Room

477, SOB, chair of House Higher Education and Workforce Development Committee (rep from Northern MN)

12:30-1:45– Bill and Nancy meet at Capitol with group of legislators to discuss business and education connections and TIMSS testing. Room 123, Capitol

Attendees include: Sen. Jim Metzen (D-hair) and Sen. Kathy Saltzman (D-Vice Chair) of Senate Business, Industry and Jobs Committee and Rep. Mindy Greiling (D) chair of House K-12 Finance Committee. Alex Cirillo from 3M may join meeting. Other senators or reps may attend.

Discussion to focus on 1) quick overview of TIMSS test (included July PowerPoint handout on Education in a global context) – how is this test diff than MN tests; 2) opportunities for business and school collaboration

2:15 check out set up in Discovery Hall at SMM

3:00-5:00 – BRIEFING FOR MINNESOTA POLICYMAKERS

Welcome

Dave Chittenden, Chair, SciMath^{MN} Board of Directors

Eric Jolly, President, Science Museum of Minnesota

Commissioner Alice Seagren, Minnesota Department of Education

Nancy Nutting, Executive Director, SciMath^{MN}

Education in a Global Context

William H. Schmidt, former coordinator TIMSS

Minnesota Perspectives Panel

Matt Richey, Professor, St. Olaf College, Northfield, MN

What is the Mathematics that's Really Needed?

Donna Studer, Associate Superintendent, Anoka-Hennepin Schools

Elementary Mathematics-A Promising Model

Alex Cirillo, Jr. Vice President, 3M Foundation

World Class Education for a Globally Competitive Workforce

Q& A

5:00-6:00 - Reception

Stay a few minutes following the program for refreshments and networking


6:00 – 8:00 SciMathMN Board of Directors – Zenon Room, Science Museum

January 18 Follow-up to briefing

As a result of the meeting with House Education Chair, Carlos Mariaini and his administrative assistant attending the briefing, **Nancy Nutting** was invited to give Bill Schmidt's presentation to the entire K-12 House Education committee

Bill Linder-Scholer was also invited to give business perspective on a quality STEM education.

Legislative committee reported it found presentations informative and helpful in providing a common base for all committee members.

 <p>www.scimathmn.org</p>	<p><i>Powering Minnesota to meet 21st century needs through K-12 mathematics, science and technology.</i></p>
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SciMath^{MN} is a non-profit, statewide education and business coalition advocating for quality K-12 science, mathematics and technology education based on research, national standards and effective practices.

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NASSMC Presenters: SciMath^{MN} Board Members:

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Minnesota State University Moorhead
Dr. Kathleen O'Keefe
The Medtronic Foundation