

*You are invited!*

Alabama Governor's Summit  
for Math and Science Education  
"Growing What Works"

*Save the Date!*  
*March 6-7, 2006*



**Key Summit Speakers:**

- Dr. David Bronner - RSA
- Dr. Gail Cassell - *Eli Lilly & Company*
- Dr. Carol Garrison - UAB
- Dr. Greg Olsen - *Sensors Unlimited and 2005 "Space Participant"*
- Gov. Bob Riley - *State of Alabama*
- Dr. William Schmidt - *U.S. National Research Center, TIMSS*
- Dr. Kenneth Wesson - *Educational Consultant, Neuroscience*

**Key Summit Activities:**

- Promote the active participation of Alabama business, education and public policy leaders in facilitated discussions of critical science, technology, engineering and mathematics (STEM) issues.
- Engage Alabama organizations with well-developed programs designed to support STEM education for students and Alabama's workforce.

Look for registration details in the mail early January 2006.

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for Math and Science Education  
"Growing What Works"  
March 6 - 7, 2006  
Renaissance Ross Bridge Resort  
Hoover, Alabama



Sponsored by  
the Alabama Mathematics, Science  
and Technology Education Coalition

**AMSTEC**

c/o National Space Science Technology Center  
320 Sparkman Drive • Huntsville, AL 35805  
phone: 256.961.7708 • fax: 256.961.7755

Affiliated with





ALABAMA GOVERNOR'S SUMMIT  
*for*  
MATHEMATICS AND SCIENCE EDUCATION

March 6-7, 2006  
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**Alabama Mathematics, Science, and Technology Education Coalition**

*Business and industry in Alabama – as drivers of innovation and production,  
and as employers – bring credibility, clout, and leverage to mathematics  
and science education reform efforts.*

Time is of the essence: Fewer U.S. students are preparing themselves for careers in science, technology, engineering, or mathematics (STEM). American business is facing the stark reality that in a world increasingly based on STEM, the qualified workforce pool is evaporating at an alarming rate and is not being replaced.

Whether one describes it as an “opportunity,” a “challenge,” or a “crisis,” the state of mathematics and science education as well as an Alabama workforce that is scientifically and technologically competent demands our attention. We have seen recent progress in science, technology, engineering, and mathematics (STEM) learning in our state. But the pace of improvement must increase substantially if our state is to meet the economic, scientific, and state/national security challenges ahead. This outcome will require a more effective collaboration among business, education, and public policy leaders, all of whom will rely on STEM talent for success. Together we can stimulate public attention to mobilize and align the resources necessary to forge a statewide commitment to continued progress.

To initiate this strategic collaboration, please accept our invitation to participate in the first **Alabama Governor's Summit for Mathematics and Science Education**, at the Renaissance Ross Bridge Resort in Hoover, Alabama, March 6-7, 2006. The Summit is hosted by the Alabama Mathematics, Science, and Technology Education Coalition (AMSTEC) and their affiliate organization, the National Alliance of State Science and Mathematics Coalitions (NASSMC), and Governor Bob Riley.

The SUMMIT is designed to take a hard look at the state of STEM education today, to spotlight examples of exemplary state-based projects supporting STEM, and to encourage businesses to actively foster change through STEM education programs that have proven to be effective, locally and state-wide. We need the credibility and active involvement of all sectors of STEM-based industry to encourage more students to pursue careers in the sciences, technology, engineering, and mathematics; to broaden and deepen the talent pool necessary to secure our state's economic leadership; and to raise the level of STEM literacy for all citizens.



## Governor's Summit on Mathematics and Science Education

March 6 -7, 2006

### SPEAKER STORYLINE:

<b>WHAT?</b>	<p><b>Gail Cassell</b> <i>Introduced by: John Wright</i> National Science Resources Center</p>	National issues: <i>Rising Above the Gathering Storm</i> ; the challenges and implications for change actions in the nation and in Alabama.
	<p><b>Governor Riley</b> <i>Introduced by: Carla Roberson</i> Alabama Power Foundation</p>	<i>Charge to the group!</i> Present "state of the state" status and policy regarding workforce/economy and education, including Alabama's successes, challenges, and needs.
	<p><b>Bill Schmidt</b> <i>Introduced by: Tina Branch</i> The Boeing Company</p>	"The Meaning of World Class Standards" TIMSS results and lessons, dispelling the myths of America's mathematics and science education as it relates to the rest of the world.
	<p><b>Ken Wesson</b> <i>Introduced by: Tom Peters</i> S.C. Coalition for Mathematics and Science</p>	What recent discoveries in neuroscience have taught us about how people learn and the implications for teaching and learning techniques for K-16 education and the workforce.
<b>SO WHAT?</b>	<p><b>Jim McMurtray</b> <i>Introduced by: John Tully</i> Michelin North America, Inc.</p>	The challenging demands of the educational system to meet global competitiveness including the need for a creative and innovative workforce.
	<p><b>Carol Garrison</b> <i>Introduced by: Michael Froning</i> UAB School of Education</p>	Bringing Alabama academia and business together to address the issues raised in national reports. How higher education (including 2-year and technical) can bridge K-12 education and work force needs.
<b>NOW WHAT?</b>	<p><b>Joe Morton</b> <i>Introduced by: Charles Nash</i> UA System</p>	What Alabama K-12 education has done to address STEM education needs.
	<p><b>David Bronner</b> <i>Introduced by: Thad Mauldin</i> Qualis Corporation</p>	Bringing education and workforce needs and positions together. Challenging business/industry, educators, and public policy/government leaders to align resources, and develop action plans supporting the educational and economic needs of Alabama.



## *Rising Above the Gathering Storm* The National Academies

### RECOMMENDATIONS

The committee reviewed hundreds of detailed suggestions—including various calls for novel and untested mechanisms—from other committees, from its focus groups, and from its own members. The challenge is immense, and the actions needed to respond are immense as well.

The committee identified two key challenges that are tightly coupled to scientific and engineering prowess: creating high-quality jobs for Americans and responding to the nation's need for clean, affordable, and reliable energy. To address those challenges, the committee structured its ideas according to four basic recommendations that focus on the human, financial, and knowledge capital necessary for US prosperity.

The four recommendations focus on actions in K–12 education (*10,000 Teachers, 10 Million Minds*), research (*Sowing the Seeds*), higher education (*Best and Brightest*), and economic policy (*Incentives for Innovation*) that are set forth in the following sections. Also provided are a total of 20 implementation steps for reaching the goals set forth in the recommendations.

Some actions involve changes in the law. Others require financial support that would come from reallocation of existing funds or, if necessary, from new funds. Overall, the committee believes that the investments are modest relative to the magnitude of the return the nation can expect in the creation of new high-quality jobs and in responding to its energy needs.

## The Process:

**How will the process be led?** A series of speakers will be followed by round table facilitator-led discussions

**How will the conversation unfold?** The discussion will begin as individual reflection, then open to general discussion, followed by focus questions and thorough recording of comments

**How are people to participate?** Some input will come from written responses and oral discussions that will take place during the facilitation sessions, an evaluator will be taking pre-summit surveys at registration, and there is a post summit survey on the survey monkey website or amstec.org link, also post summit telephone surveys will be developed to address the achievements of the summit activity

**How will the conversation be captured?** Each table of 8 participants will have a facilitator who will summarize and record the group's input, evaluation

**What will be done with the notes?**

The notes from the initial round table will be summarized and presented at the end of the day, the discussion on day two will be captured in a similar way and a representative team of stakeholders will develop a series of findings and recommendations for participant review and input over the web