New Mexico Partnership for Math and Science Education

A Sample of Major National Reports on the Math and Science Crisis

Science and Engineering Indicators – NSF
Jan. 2006

Baldrige Education Criteria - 2006

National Defense Education and Innovation Initiative – AAU
Jan. 2006

America’s Pressing Challenge – Building a Stronger Foundation - NSF
Feb. 2006

Math and Science Education in a Global Age: What the U.S. can Learn from China
May 2006

The PACE Acts – Protecting America’s Competitive Edge

S.2197 PACE – Energy Act

S.2198 PACE – Education Act

S.2199 PACE – Finance Act

S.3936 The National Competitiveness Investment Act

...we must ensure a continuous supply of highly trained mathematicians, scientists, engineers, technicians, and scientific support staff as well as a scientifically, technically, and numerically literate population.

...Our Nation must devote the necessary resources now to revitalize our pre-college STEM education system... we must recognize the existing crisis and take the necessary actions.

...the foundation upon which these capabilities have stood is threatened by serious problems in our education system...

“...innovating and improving education is critical not only to America’s financial security but also to our national security... the highest priority is to vastly improve K-12 math and science education.”

Compiled by: Jack Jekowski
Innovative Technology Partnerships, LLC

October, 2006
### New Mexico Partnership for Math and Science Education: A Sample of Major National Reports on the Math and Science Crisis

**March 8, 2006**

**http://www.nassmc.org**

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<td><strong>Teacher Preparation</strong></td>
<td>Use new National Security Science and Engineering Education Act to rebuild the number of science and engineering professionals as well as qualified teachers in science and math. Focus on increasing the number of science and math teachers who have graduated and are available for the schools in exchange for a period of K-12 teaching in science or math; some teacher education programs should be designed to attract individuals who are not traditional education majors or science and engineering students.</td>
<td>Create a Adjunct Teacher Corps</td>
<td>Increase the number of quality teachers and improve the quality of data preparation.</td>
<td>Create an Adjunct Teacher Corps</td>
<td>Focus on streamlining the process to creating high-performance schools.</td>
<td>Provide incentives for effective teachers to choose to teach in low-performing schools.</td>
<td>Increase AP teachers workforce</td>
<td>This should extend the teaching environment and make the teaching profession more attractive for K-12 math and science teachers.</td>
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<td><strong>Curriculum Alignment</strong></td>
<td>Ensure national standards in K-12 math and science teaching in K-12. Achieve this with: Standards identified for secondary graduation to match knowledge and skills with institutions of higher education to improve instruction and curriculum.</td>
<td>K-12 math and science education will be strengthened through K-12 curriculum alignment and higher standards of higher education to improve instruction and curriculum.</td>
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<td><strong>Public Awareness</strong></td>
<td>Increase the number of teachers and students in K-12 math and science teaching in K-12.</td>
<td>Increase awareness and make data more accessible to teachers, administrators, and policymakers to identify improvement opportunities and choices.</td>
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<td><strong>Valid Metrics</strong></td>
<td>Increase awareness and make data more accessible to teachers, administrators, and policymakers to identify improvement opportunities and choices.</td>
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<td><strong>Federal Investment</strong></td>
<td>Increase funding for Math and Science in the President's 2005 budget.</td>
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<td><strong>Other</strong></td>
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<td>The requirements of our systems of research and development are a concern that we must address.</td>
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http://www.nassmc.org

Create a NM math and science initiative

http://www.nassmc.org

Upgrade K-12 math and science teaching to foster higher student achievement, including differentiated pay scales

http://www.nassmc.org

Initiate a major campaign to recruit, prepare, train and retrain teachers

http://www.nassmc.org

Rising Above the Gathering Storm

http://www.nassmc.org

• The Federal Government should act now to attract and retain an adequate pool of teachers

http://www.nassmc.org

Employee participation

http://www.nassmc.org

Career Support

http://www.nassmc.org

Research-driven

http://www.nassmc.org

Federal Investment

http://www.nassmc.org

• Research opportunities from High School to Post-doc

http://www.nassmc.org

Educational incentives for Employers

http://www.nassmc.org

R&D investments

http://www.nassmc.org

Other

http://www.nassmc.org

Immigration reform

http://www.nassmc.org

Business involvement and practical curriculum

http://www.nassmc.org

Report

U.S. Dept. of Education Math and Science Initiative

May 2003

NSF Science and Eng. Workforce August 2003

American Diploma Project 2004

A Commitment to America’s Future – BIEF Jan. 2005


Rising Above the Gathering Storm Oct. 2005

National Summit on Competitiveness Dec. 2005

NMPSMSE Math and Science Town Hall

http://www.nassmc.org

• New Mexico Partnership for Math and Science Education: March 8, 2006

http://www.nassmc.org

• Rising Above the Gathering Storm

http://www.nassmc.org

• The Federal Government should act now to attract and retain an adequate pool of teachers

http://www.nassmc.org

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• Career Support

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• Research-driven

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• Federal Investment

http://www.nassmc.org

• Other

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Create a NM math and science initiative

http://www.nassmc.org

Increase America’s talent pool by vastly increasing the number of high-quality math and science teachers

http://www.nassmc.org

• Raised 0.9M teachers, educate 11 million students

http://www.nassmc.org

• Strengthens 200,000 teachers’ skills, creates educators every day - compute initiatives, mentor’s programs, IP

http://www.nassmc.org

Create a unit in the Public Education Department for Science and Math and increase funding for states to improve math and science education

http://www.nassmc.org

Compiling by: Jack Jekowski

Innovative Technology Partnerships, LLC