Executive Order: National Mathematics Advisory Panel

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. Policy. To help keep America competitive, support American talent and creativity, encourage innovation throughout the American economy, and help State, local, territorial, and tribal governments give the Nation's children and youth the education they need to succeed, it shall be the policy of the United States to foster greater knowledge of and improved performance in mathematics among American students.

Sec. 2. Establishment and Mission of Panel. (a) There is hereby established within the Department of Education (Department) the National Mathematics Advisory Panel (Panel).

(b) The Panel shall advise the President and the Secretary of Education (Secretary) consistent with this order on means to implement effectively the policy set forth in section 1, including with respect to the conduct, evaluation, and effective use of the results of research relating to proven-effective and evidence-based mathematics instruction.

Sec. 3. Membership and Chair of Panel. (a) The Panel shall consist of no more than 30 members as follows:

(i) no more than 20 members from among individuals not employed by the Federal Government, appointed by the Secretary for such terms as the Secretary may specify at the time of appointment; and

(ii) no more than 10 members from among officers and employees of Federal agencies, designated by the Secretary after consultation with the heads of the agencies concerned.

(b) From among the members appointed under paragraph (3)(a)(i) of this order, the Secretary shall designate a Chair of the Panel.

(c) Subject to the direction of the Secretary, the Chair of the Panel shall convene and preside at meetings of the Panel, determine its agenda, direct its work and, as appropriate to deal with particular subject matters, establish and direct the work of subgroups of the Panel that shall consist exclusively of members of the Panel.

Sec. 4. Report to the President on Strengthening Mathematics Education. In carrying out subsection 2(b) of this order, the Panel shall submit to the President, through the Secretary, a preliminary report not later than January 31, 2007, and a final report not later than February 28, 2008. Both reports shall, at a minimum, contain recommendations, based on the best available scientific evidence, on the following:

(a) the critical skills and skill progressions for students to acquire competence in algebra and readiness for higher levels of mathematics;

(b) the role and appropriate design of standards and assessment in promoting mathematical competence;

(c) the processes by which students of various abilities and backgrounds learn mathematics;

(d) instructional practices, programs, and materials that are effective for improving mathematics learning;

(e) the training, selection, placement, and professional development of teachers of mathematics in order to enhance students' learning of mathematics;

(f) the role and appropriate design of systems for delivering instruction in mathematics that combine the different elements of learning processes, curricula, instruction, teacher training and support, and standards, assessments, and
accountability;

(g) needs for research in support of mathematics education;

(h) ideas for strengthening capabilities to teach children and youth basic mathematics, geometry, algebra, and calculus and other mathematical disciplines;

(i) such other matters relating to mathematics education as the Panel deems appropriate; and

(j) such other matters relating to mathematics education as the Secretary may require.

Sec. 5. Additional Reports. The Secretary may require the Panel, in carrying out subsection 2(b) of this order, to submit such additional reports relating to the policy set forth in section 1 as the Secretary deems appropriate.

Sec. 6. General Provisions. (a) This order shall be implemented in a manner consistent with applicable law, including section 103 of the Department of Education Organization Act (20 U.S.C. 3403), and subject to the availability of appropriations.

(b) The Department shall provide such administrative support and funding for the Panel as the Secretary determines appropriate. To the extent permitted by law, and where practicable, agencies shall, upon request by the Secretary, provide assistance to the Panel.

(c) The Panel shall obtain information and advice as appropriate in the course of its work from:

(i) officers or employees of Federal agencies, unless otherwise directed by the head of the agency concerned;

(ii) State, local, territorial, and tribal officials;

(iii) experts on matters relating to the policy set forth in section 1;

(iv) parents and teachers; and

(v) such other individuals as the Panel deems appropriate or as the Secretary may direct.

(d) Members of the Panel who are not officers or employees of the United States shall serve without compensation and may receive travel expenses, including per diem in lieu of subsistence, as authorized by law for persons serving intermittently in Government service (5 U.S.C. 5701-5707), consistent with the availability of funds.

(e) Insofar as the Federal Advisory Committee Act, as amended (5 U.S.C. App.) (the "Act"), may apply to the administration of any portion of this order, any functions of the President under that Act, except that of reporting to the Congress, shall be performed by the Secretary in accordance with the guidelines issued by the Administrator of General Services.

(f) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable by any party at law or in equity against the United States, its departments, agencies, entities, officers, employees, or agents, or any other person.

Sec. 7. Termination. Unless hereafter extended by the President, this Advisory Panel shall terminate 2 years after the date of this order.

GEORGE W. BUSH

THE WHITE HOUSE,

April 18, 2006.

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Return to this article at:

THE SECRETARY OF EDUCATION
WASHINGTON, DC 20202

CHARTER

National Mathematics Advisory Panel

**Authority**

The National Mathematics Advisory Panel (Panel) is established within the Department of Education under Executive Order 13398 by the President of the United States and governed by the provisions of the Federal Advisory Committee Act (FACA) (P.L. 92-463, as amended; 5 U.S.C. App.).

**Background**

In order to keep America competitive, support American talent and creativity, encourage innovation throughout the American economy, and help State, local, territorial, and tribal governments give the Nation's children and youth the education they need to succeed, it shall be the policy of the United States to foster greater knowledge of and improved performance in mathematics among American students.

**Purpose and Functions**

The Panel shall advise the President and the Secretary of Education (Secretary) on the conduct, evaluation, and effective use of the results of research relating to proven-effective and evidence-based mathematics instruction, consistent with policy set forth in section 1 of the Executive Order. In carrying out its mission, the Panel shall submit to the President, through the Secretary, a preliminary report not later than January 31, 2007, and a final report not later than February 28, 2008.

The Panel shall obtain information and advice as appropriate in the course of its work from:

1. Officers or employees of Federal agencies, unless otherwise directed by the head of the agency concerned;
2. State, local, territorial, and tribal officials;
3. Experts on matters relating to the policy set forth in section 1;
4. Parents and teachers; and
5. Such other individuals as the Panel deems appropriate or as the Secretary may direct.

*Our mission is to ensure equal access to education and to promote educational excellence throughout the nation.*
Structure

The Panel shall consist of no more than 30 members as follows:

1. No more than 20 members from among individuals not employed by the Federal Government, appointed by the Secretary for such terms as the Secretary may specify at the time of appointment; and

2. No more than 10 members from among officers and employees of Federal agencies, designated by the Secretary after consultation with the heads of the agencies concerned. The Secretary shall designate a Chair of the Panel from among the group of 20 members who are not employed by the Federal Government.

Non-Federal members of the Panel shall serve as Special Government Employees (SGEs). As SGEs, the members will provide personal and independent advice based on their own individual expertise and experience.

Meetings

Subject to the direction of the Secretary, the Chair, in consultation with the Designated Federal Official (DFO), shall convene and preside at meetings of the Panel, determine its agenda, direct its work, and, as appropriate, deal with particular subject matters, and establish and direct the work of subgroups of the Panel that shall consist exclusively of members of the Panel.

The Secretary or her designee shall name the Designated Federal Official (DFO) to the Panel. The Panel shall meet at the call of the DFO or the DFO's designee, and this person shall be present for all meetings. The DFO will work in conjunction with the Chair to convene meetings of the Panel.

Meetings are open to the public except as may be determined otherwise by the Secretary in accordance with Section 10(d) of the FACA. Adequate public notification will be given in advance of each meeting. Meetings are conducted and records of the proceedings kept as required by applicable laws. A majority of the members of the Panel shall constitute a quorum but a lesser number may hold hearings.

Estimated Annual Cost

Members of the Panel who are not officers or employees of the United States shall serve without compensation and may receive travel expenses, including per diem in lieu of subsistence, as authorized by law for persons serving intermittently in Government service (5 U.S.C. 5701-5707), consistent with the availability of funds.
Funds will be provided by the Department of Education to administer the Panel. The estimated annual person-years of staff support are four (4) Full-Time Equivalents. The estimated two-fiscal-year cost will be approximately $1,000,000.

Report

The Panel shall submit to the President, through the Secretary, a preliminary report not later than January 31, 2007, and a final report not later than February 28, 2008. Both reports shall, at a minimum, contain recommendations, based on the best available scientific evidence, on the following:

1. The critical skills and skill progressions for students to acquire competence in algebra and readiness for higher levels of mathematics;

2. The role and appropriate design of standards and assessment in promoting mathematical competence;

3. The processes by which students of various abilities and backgrounds learn mathematics;

4. Instructional practices, programs, and materials that are effective for improving mathematics learning;

5. The training, selection, placement, and professional development of teachers of mathematics in order to enhance students' learning of mathematics;

6. The role and appropriate design of systems for delivering instruction in mathematics that combine the different elements of learning processes, curricula, instruction, teacher training and support, and standards, assessments, and accountability;

7. Needs for research in support of mathematics education;

8. Ideas for strengthening capabilities to teach children and youth basic mathematics, geometry, algebra, and calculus and other mathematical disciplines;

9. Such other matters relating to mathematics education as the Panel deems appropriate; and

10. Such other matters relating to mathematics education as the Secretary may require.

The Secretary may require the Panel, in carrying out subsection 2(b) of Executive Order 13398, to submit such additional reports relating to the policy set forth in section 1 of the Executive Order.
Termination

Unless extended by the President, this Advisory Panel shall terminate April 18, 2008.

This charter expires April 18, 2008.

Approved:

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\text{MAY - 3 2006} \\
\text{Date}
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Margaret Spelling
Secretary

Filing date:
May 22, 2006

Dear Panelists:

Welcome to the first meeting of the National Mathematics Advisory Panel. The President and I are honored that you have agreed to be a part of this important group.

As you know, it is crucial that America’s students receive solid math instruction in the early grades to prepare them to take and pass algebra and other challenging courses in middle and high school. These math skills are in high demand by employers seeking to compete in the 21st century global economy.

We appreciate your guidance on how to promote excellence in mathematics education and look forward to hearing the Panel’s recommendations through your interim and final reports.

Thank you again for joining us in this vital cause on behalf of our nation’s students.

Sincerely,

Margaret Spellings

Our mission is to ensure equal access to education and to promote educational excellence throughout the nation.
"You've got to know math if you're going to compete in this 21st-century world."
- President George W. Bush

"It is more important than ever that our students receive solid math instruction in the early grades to prepare them to take and pass algebra and other challenging courses in middle and high school."
- U.S. Secretary of Education Margaret Spellings

On April 18, 2006, President Bush issued an Executive Order creating the National Mathematics Advisory Panel. The Panel will advise the President and the Secretary of Education on the best use of scientifically based research to advance the teaching and learning of mathematics.

- Modeled after the influential National Reading Panel, the National Mathematics Panel (NMP) will examine and summarize the scientific evidence related to the teaching and learning of mathematics, with a specific focus on preparation for and success in learning algebra.
- The NMP will issue two reports containing policy recommendations on how to improve mathematics achievement for all students.

Today, Secretary Margaret Spellings announced the 17 expert panelists and six ex-officio members who will comprise the National Math Panel.

- The NMP will be chaired by Dr. Larry Faulkner, president of the Houston Endowment and President Emeritus of the University of Texas at Austin. Other panelists:
  - Dr. Camilla Benbow, Vice Chair, Dean of Education and Human Development, Vanderbilt University, Peabody College
  - Dr. Deborah Ball, Dean, School of Education and Collegiate Professor, University of Michigan
  - Dr. A. Wade Boykin, Professor and Director of the Developmental Psychology Graduate Program in the Department of Psychology, Howard University
  - Dr. Francis "Skip" Fennell, Professor of Education, McDaniel College (Md.); President, National Council of Teachers of Mathematics
  - Dr. David Geary, Curators' Professor, Department of Psychological Sciences, University of Missouri at Columbia
  - Dr. Russell Gersten, Executive Director, Instructional Research Group; Professor Emeritus, College for Education, University of Oregon
  - Nancy Ichinaga, former Principal, Bennett-Kew Elementary School, Inglewood, Calif.
  - Dr. Tom Loveless, Director, Brown Center on Education Policy and Senior Fellow in Governance Studies, The Brookings Institution
  - Dr. Liping Ma, Senior Scholar for the Advancement of Teaching, Carnegie Foundation
  - Dr. Valerie Reyna, Professor of Human Development and Professor of Psychology, Cornell University
  - Dr. Wilfried Schmid, Professor of Mathematics, Harvard
University
- Dr. Robert Siegler, Teresa Heinz Professor of Cognitive Psychology, Department of Psychology, Carnegie Mellon University
- Dr. Jim Simons, President of Renaissance Technologies Corporation; former Chairman of the Mathematics Department, State University of New York at Stony Brook
- Dr. Sandra Stotsky, Independent researcher and consultant in education; former Senior Associate Commissioner, Massachusetts Department of Education
- Vern Williams, Math Teacher, Longfellow Middle School, Fairfax, Va.
- Dr. Hung-Hsi Wu, Professor of Mathematics, University of California at Berkeley

- Ex-officio members:
  - Dan Berch, National Institute of Child Health and Human Development, National Institutes of Health
  - Diane Jones, White House Office of Science and Technology Policy
  - Tom Luce, Assistant Secretary, U.S. Department of Education
  - Kathie Olsen, Deputy Director, National Science Foundation
  - Raymond Simon, Deputy Secretary, U.S. Department of Education
  - Grover "Russ" Whitehurst, Director, Institute of Education Sciences, U.S. Department of Education

- All meetings of the NMP will be open to the public and will be announced in the Federal Register.

The NMP will issue an interim report to the President and Secretary by January 31, 2007. A final report will be issued no later than February 28, 2008. Topics to be addressed by the NMP include:

- The critical skills and skill progressions needed to learn algebra and prepare for more advanced courses;
- The proper role and design of standards and assessment in promoting student competence in math;
- The processes by which students of various abilities or backgrounds learn math;
- Institutional practices, programs and materials that have proven effective in improving math learning;
- How the training, selection, placement and professional development of math teachers affect student achievement; and
- Research needs in support of math education.

The need for action is clear. To gain an edge in the 21st century global economy, America's high school graduates need solid math skills, whether proceeding to college or going into the workforce. The rest of the world is "gathering strength" and forcing us to catch up.

- "Tomorrow's jobs will go to those with education in science, engineering, and mathematics and to high-skill technical workers."—The Looming Workforce Crisis, National Association of Manufacturers, 2005.
- "The scientific and technical building blocks of our economic leadership are eroding at a time when many other nations are gathering strength."—Rising Above the Gathering Storm, National Academies, 2005.
- Students who take advanced mathematics courses in high school are far more likely to earn a bachelor's degree in college (College Board).
- Students from low-income families who acquire strong math skills by the 8th grade are 10 times more likely to finish college than peers of the same background who do not (National Center on Education Statistics).
- America's 15-year-olds ranked 24th out of 29 developed nations in mathematics literacy and problem-solving, according to the 2003 Programme for International Student Assessment (PISA) test.
Less than half of America’s high school graduates are prepared for college-level math and science (ACT).

The National Mathematics Panel is part of President Bush’s agenda to strengthen math education in order to give our students the skills to succeed in the 21st century. Included in his FY 2007 budget request is **$260 million** to allow the National Mathematics Advisory Panel to continue its work and to help states implement its recommendations. Key to this effort are two new programs:

- **Math Now for Elementary School Students** — Modeled after the innovative Reading First program, it would utilize the NMP’s recommendations to promote scientifically based practices in math instruction so students are prepared for success in algebra and more advanced math as they move into middle and high school.

- **Math Now for Middle School Students** — Similar to the Striving Readers Initiative, it would diagnose older students’ deficiencies and provide intensive, systematic instruction to enable them to take and pass algebra.

For more information please visit www.ed.gov or call 1-800-USA-LEARN.