



Presidential Commitments in Support of PCAST Recommendations on Science, Technology, Engineering, and Mathematics Education

February 7, 2012

A number of commitments announced by President Obama today in conjunction with the White House Science Fair respond directly to recommendations in two reports by the President's Council of Advisors on Science and Technology.

In September 2010, PCAST released *Prepare and Inspire: K-12 Education in Science, Technology, Engineering, and Math (STEM) for America's Future*, which, among other recommendations, called for a major push to recruit and train 100,000 great STEM teachers over the next decade able to prepare and inspire students. In support of that goal, the President announced today:

- **A new \$80 million investment to help prepare effective STEM teachers:** The President's upcoming budget will request \$80 million for a new competition by the Department of Education to support effective STEM teacher preparation programs, such as those that allow students to simultaneously earn both a STEM degree and a teaching certificate, and provide undergraduates with early and intensive experiences in the classroom honing their skills.
- **A new \$22 million investment from the philanthropic and private sector to complement the Administration's efforts:** After the President issued his call to action to recruit and prepare 100,000 effective STEM teachers, over 115 organizations, led by Carnegie Corporation of New York and Opportunity Equation, came together to form a coalition called "100Kin10" to help reach the President's goal. Today, 14 of those organizations – including Carnegie, Google, the S.D. Bechtel, Jr., Bill & Melinda Gates, Freeport McMoran, and Michael and Susan Dell Foundations – are announcing a \$22 million fund to invest in STEM teacher preparation. In addition, several other 100Kin10 partners are making over 100 individual commitments, such as:
 - **Citizen Schools** will bring 10,000 additional STEM professionals into classrooms to teach part-time over the next 10 years;
 - **National Math and Science Initiative** will prepare 4,000 new STEM teachers from 31 UTeach sites by 2015;
 - **Teach for America** will recruit 11,000 STEM Corps members by 2015 and connect other qualified applicants to additional STEM teaching opportunities;
 - **Donors Choose** will inspire 50,000 citizens to sponsor projects in math and science classrooms over the next two years, delivering \$15M in critical classroom resources and helping 600,000 students nationwide;
 - **Google** will share its talent management practices to help find, grow, and retain outstanding STEM teachers by partnering with districts and organizations for comprehensive reform and hosting talent academies with administrators and decision-makers; and,

- **University of Chicago** will create a framework for organizing the learning that results from “100Kin10” investments and coordinate research among partners on key questions about STEM teacher recruitment, preparation, induction, and development.

A complete list of partners, their commitments, and general information about 100Kin10 is available at their website: www.100Kin10.org.

- **New policies and investments to recruit, support, retain and reward excellent STEM teachers:** To improve the teaching and learning of STEM and encourage our best STEM teachers to stay in the profession, we must implement a system that recognizes and rewards teacher excellence. That’s why, this year, the Department of Education will devote a portion of its upcoming \$300 million Teacher Incentive Fund competition to support state and local efforts to improve compensation, evaluation, and professional development systems for STEM educators. In addition, the Department of Education will provide new incentives to improve the quality of teacher preparation programs by targeting TEACH Grants to students attending top-tier schools, and focusing on a smaller number of more meaningful outcome indicators about their quality and impact on teacher performance. Concurrently, the National Science Foundation will continue to emphasize the quality of teacher preparation programs and plans for innovation in its Robert Noyce Scholarship program.

Today, the President announced his support for the goal of producing, over the next decade, 1 million more STEM professionals than are projected to graduate at current rates—a goal at the core of PCAST’s newest report, [*Engage to Excel: Producing One Million Additional College Graduates with Degrees in Science, Technology, Engineering, and Mathematics*](#), released today. In support of that goal, the President committed to:

- **A priority on undergraduate STEM education reform in the President’s upcoming budget:** The President announced more than \$100 million in investments by the National Science Foundation to improve undergraduate STEM education practices through its programs such as Widening Implementation and Demonstration of Evidence-based Reforms (WIDER), Transforming Undergraduate Education in Science, Technology, Engineering and Mathematics (TUES), and programs that impact community colleges and minority-serving institutions. This will support the development, identification, and scale-up of educational practices that increase the number of STEM graduates and the quality of their preparation. In addition, the Department of Education’s proposed First in the World competition will include a STEM priority.
- **A new K-16 education initiative jointly administered by the Department of Education and the National Science Foundation:** To support comprehensive reform efforts in K-16 education, the President’s FY 2013 budget will fund a jointly administered initiative to improve mathematics education, with \$30 million from the Department of Education and \$30 million from the National Science Foundation. This initiative will develop, validate, and scale up evidence-based approaches to improve student learning at the K-12 and undergraduate levels through a “tiered-evidence framework” to maximize the impact of mathematics education investments.

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