NEWS RELEASE



Business Roundtable

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Citing "Critical Situation" in Science and Math, Business Groups Urge Approval of New National Agenda for Innovation

Plan Calls for Doubling Science, Technology, Engineering and Math Graduates in 10 Years

Washington, DC – Saying our "scientific and technical capacity is beginning to atrophy even as other nations are developing their own human capital," 15 leading business organizations called today for doubling the number of science, technology, engineering and mathematics graduates by the year 2015.

"The critical situation in American innovation threatens to undermine our standard of living at home and our leadership in the world," said John J. Castellani, President of Business Roundtable, which organized the business groups in this effort. "We cannot wait for another Sputnik to propel our energy forward in this area.

"The good news is that a strong consensus has emerged on what needs to be done to bolster American innovation and maintain our scientific and technological leadership. Now we must mobilize Americans to adopt and carry out some straightforward solutions that will make a significant difference for our students and our economy."

The groups – representing businesses of every size and from every sector of the economy – released an action plan entitled, "Tapping America's Potential: The Education for Innovation Initiative." It focuses on five areas:

- Building public support to make improvement in these fields a national priority by launching an awareness campaign;
- Motivating students and adults to study and enter careers in these disciplines, with a special effort geared to those in underrepresented groups, through incentives such as scholarship and internship opportunities, and the expansion of undergraduate retention programs;
- Upgrading elementary and secondary teaching in math and science to foster higher student achievement;
- Reforming visa and immigration policies to enable the U.S. to attract and retain top science, technology, engineering and math students from around the world to study and stay to work in the U.S.; and
- Boosting and sustaining funding for basic research, especially in the physical sciences and engineering.

"We are falling far behind on the number of our students graduating in the fields of math and science, and it is critical for the business community to be engaged in changing this trend," said Thomas J. Donohue, President and CEO of the U.S. Chamber of Commerce. "It is from math and science that we have enjoyed the many technological innovations of the past hundred years, and they are the key to our future economic growth and security."

"The United States has been the world's technology leader because of our past investments in education, research and development, and technology talent," said Lezlee Westine, President and CEO of TechNet. "But today, other nations are taking bold steps to catch up to – and even surpass – the United States in science, technology, engineering and math achievement.

"We cannot take for granted America's continued technological and economic preeminence," continued Westine. "If we are to maintain our nation's global leadership in this new era, we must redouble our commitment to innovation."

The group's report identifies several troubling indicators that the U.S. is losing its innovative edge. It cites, for example, flagging student interest in engineering, and flagging government investment in basic research in the physical sciences. The report notes that the percentage of students planning to pursue engineering degrees declined by one-third between 1992 and 2002. It also points out that funding for basic research in the physical sciences as a percentage of the gross domestic product has declined by half since 1970.

The relatively poor performance of American high school students in comparison to their peers in Asia and Europe is also emphasized in the report. On a recent international assessment of the problemsolving skills of 15-year-olds, the U.S. had the smallest percentage of top performers and the largest percentage of low performers of any participating developed country.

"In the face of the declining interest and proficiency by Americans in science, math and engineering, American industry has become increasingly dependent—some would say overly dependent—on foreign nationals to fill the demand for talent in a variety of fields that require strong backgrounds in science, technology, engineering and mathematics," the report says. "A number of developments—including heightened security after September 11, growing competition from other countries for the same foreign talent, and the technological capacity for foreign talent to work in their home countries—have underscored the need for greater scientific and technological self-sufficiency in our country."

The report describes "a national problem that demands national leadership and a sense of national purpose to create the impetus for crucial state, local, private and individual action."

"We also understand," Castellani said, "that as the report notes, 'the private sector can and must do more."

He said the business community would take the lead in building public awareness and support for greater interest, investment and performance in science, technology, engineering and math by:

- Expanding the successful State Scholars program that encourages students to take rigorous courses in high school;
- Offering more opportunities for company employees to serve as role models and mentors in these fields;
- Providing teachers with materials that will show students the importance of math and science in a wide range of careers;
- Funding scholarships for students and professional development for math and science teachers;
- Working with education groups, the media and the entertainment industry on messages showing how math and science learning leads to a wide range of interesting careers; and
- Meeting with and lobbying Governors and Members of Congress to carry out the report's recommendations.

"When we look at the relationship of innovation to economic growth and security, and the relationship of math and science skills to student success, it is clear that this initiative is one of the most important efforts in which the business community is engaged," Castellani said.

The 15 organizations releasing "Tapping America's Potential: The Education for Innovation Initiative" are:

- AeA
- Business-Higher Education Forum
- Business Roundtable
- Council on Competitiveness
- Computer Systems Policy Project
- Information Technology Association of America
- Information Technology Industry Council
- Minority Business RoundTable
- National Association of Manufacturers
- National Defense Industrial Association
- Semiconductor Industry Association
- Software and Information Industry Association
- TechNet
- Telecommunications Industry Association
- U.S. Chamber of Commerce

To view the complete recommendations in "Tapping America's Potential: The Education for Innovation Initiative," <u>click here</u>.

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Business Roundtable (www.businessroundtable.org) is an association of chief executive officers of leading corporations with a combined workforce of more than 10 million employees in the United States and \$4 trillion in revenues. The chief executives are committed to advocating public policies that foster vigorous economic growth and a dynamic global economy.