



The New York Times

The Caucus

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[A Push for Science and Technology Learning](#)

By [JEFF ZELENY](#)

Doug Mills/The New York Times President Obama watched a science demonstration by Brian Hortellano, a student from Oakton High School in Vienna, Va.

President Obama devotes a fair amount of time to sports. He plays golf most weekends. He filled out his N.C.A.A. championship bracket for all ESPN viewers to see. And he carefully follows his hometown Chicago teams: the White Sox, the Bulls and the Bears.

But on Monday, Mr. Obama said academics should be receiving an athletic-like focus. And as he presented a set of initiatives intended to improve the science and math scores of American students, he announced that the White House would begin holding an annual science fair starting next year.

“If you win the N.C.A.A. championships, you come to the White House. Well, if you’re a young person and you’ve produced the best experiment or design, the best hardware or software, you ought to be recognized for that achievement, too,” Mr. Obama said. “Scientists and engineers ought to stand side by side with athletes and entertainers as role models, and here at the White House, we’re going to lead by example.”

He added, “We’re going to show young people how cool science can be.”

Mr. Obama presented the “Educate to Innovate” campaign on Monday. Sally Ride, the first American woman in space, was on hand, along with students and dozens of scientists and other administration officials. After speaking for about 15 minutes, the president inspected the “Cougar Cannon,” a device made by two students that is intended to scoop up and toss moon rocks.

He watched and smiled as two students from a high school in Vienna, Va., fired up the machine, which tossed balls into the air, one after another. It resembled a slow-motion batting machine, of sorts.

“How long did it take for you to build this?” Mr. Obama asked.

Six weeks, the students replied.

“This is all stuff you can get at Radio Shack?” Mr. Obama said.

No, the students said, shaking their heads.

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The Washington Post

From Obama, a new focus on math and science education -- and a new plum for prize-winners



President Obama poses with students from various schools following his remarks on science, technology, engineering and math education initiatives at the White House. (Jason Reed/Reuters)

Nov. 23, 2009

By Michael D. Shear

President Obama today announced partnerships with private businesses to increase achievement in math and science, saying the country must do more to compete with the world in those areas.

The new federal campaign will encourage businesses and non profit groups -- including the Discovery Channel, Intel, and Time Warner -- to focus more energy and money to teach kids about math and science.

"The hard truth is that for decades we have been losing ground," Obama told a group in the East Room of the White House Monday, noting that American students are rated 21st in the world in science and 25th in math. "We all believe that we can't allow division and indifference to imperil our position in the world."

Obama's proposal, called "Educate to Innovate," will feature a new two-year focus on math and science by Sesame Street and a national "lab day," sponsored by several national philanthropic groups.

The president also announced a new, annual White House science fair for the winners of national science and math competitions.

"If you win the NCAA championships, you come to the White House," he said. "Scientists and engineers ought to stand side by side with athletes and celebrities as role models."

By 44 Editor | November 23, 2009; 12:07 PM ET

The Philadelphia Enquirer



November 24, 2009

Obama seeking to boost study of science, math

He enlists corporations, charities, even video- game designers in a \$260 million program.

By Kate Andersen Brower and Roger Runningen

Bloomberg News

WASHINGTON - President Obama said he was enlisting corporations and foundations - and video-game designers - in a \$260 million effort to promote the study of science and technology.

The administration has recruited company executives including Ursula Burns, chief executive officer of Xerox Corp.; Glenn Britt, president and CEO of Time Warner Cable Inc.; and Antonio Perez, CEO of Eastman Kodak Co., as well as former astronaut Sally Ride.

The Carnegie Corp. of New York and the Bill and Melinda Gates Foundation also are backing the effort.

"The hard truth is that, for decades, we've been losing ground" in drawing students into science and mathematics, Obama said at the White House yesterday. "Scientists and engineers ought to stand side by side with athletes and entertainers as role models."

The program, called Educate to Innovate, is a follow-up to Obama's call earlier this year for a national campaign to raise American students "from the middle to the top of the pack in science and math" in 10 years.

Public-television staple *Sesame Street* is backing the campaign and will have a two-year focus on science and math; Discovery Communications Inc. is launching a five-year programming block dedicated to promoting science education, and the MacArthur Foundation is teaming up with the technology industry to hand out prizes in a contest to create video games with math- and science-related themes.

Obama is making education one of the cornerstones of what he says will be a foundation for long-term U.S. economic growth.

The administration has set a goal of making the United States the world leader in the percentage of college graduates by 2020. In July he unveiled "Race to the Top," a program in which states will compete for grants based on plans to improve their public education systems.

The \$260 million is a "drop in the bucket" compared with the roughly \$500 billion that federal, state, and local taxpayers spend on education each year, said Andy Smarick, a distinguished visiting fellow at the Thomas B. Fordham Institute, a nonprofit education research group in Washington.

"This is a White House attempt to show that the president cares about" U.S. competitiveness in science, technology, engineering, and math, Smarick said. "But this alone isn't going to change the ball game."

The hurdle for the United States is persuading students to opt for careers in science and technology, according to Russ Whitehurst, a senior fellow at the Washington-based Brookings Institution.

Students are "as prepared or more prepared than they ever were" for science careers, Whitehurst said. "They're just choosing not to do that sort of thing."

Many U.S. college graduates choose careers that offer higher salaries and more job security, Whitehurst said.

Obama said the administration wanted to elevate tech careers and "to show young people how cool science can be." As part of that, he said the administration would begin an annual White House science fair to showcase winners of national competitions in science and technology.



12:45 PM, Nov. 23, 2009

TWC Launches 'Million Minds' Initiative

By: Adam Balkin

Over 40 years ago, school-age children were in awe of the first pictures of man's first steps on the moon. The tremendous science and engineering feat sent many students on to pursue studies that involved disciplines in the sciences. But now, decades after that pioneering effort, there's a concern that today's students are not taken with the same thirst for knowledge and technology -- a move towards changing that mind set was undertaken Monday by President Barack Obama. NY1's Adam Balkin filed the following report.

Hoping to regain the innovative spirit that made the U.S. the world power it is today, the White House is unveiling a new initiative, Educate to Innovate, aimed at connecting parents and their children to science, technology, engineering and math programs -- also known as STEM -- in their communities.

Some noted members of the scientific community who will head up this initiative include the first American woman in space, Sally Ride. Major corporations are also contributing to the effort including NY1's own parent company, Time Warner Cable.

Time Warner Cable is donating \$100 million over the next five years to the effort under its banner, "Connect a Million Minds", launched at events nationwide last week. That donation will include stories NY1 will cover highlighting STEM events, ads promoting the effort, and most notably a website, www.connectamillionminds.com that includes a Connectory -- a database compiled by the Coalition for Science After School, where parents and kids can find activities, museums and other learning centers in their neighborhoods.

Time Warner Cable execs say the fact that the company relies on, and will continue to rely on, employees with a strong background in science and technology is just one reason why investing so much money in Connect a Million Minds, was pretty much a no brainer.



"We are a technology business and everybody knows this but our country is falling behind other countries in competitiveness because we're not training enough young people in these skills of math and science and technology," said Time Warner Cable CEO Glenn Britt. "So our effort is about connecting young people with opportunities in their communities that they'll find fun and interesting to explore these science and technology subjects."

And as the president mention, the company's educational endeavor has found a ready partner in DEKA CEO Dean Kamen whose not for profit organization FIRST -- For Inspiration and Recognition of Science and Technology -- has hundreds of thousands of kids across the globe working together to solve problems in friendly competitions involving Legos right on up to robotics.

Kamen, the animated innovator and benefactor, perhaps best known for the development of the segway, says in order to make schoolwork seem less like work, we need to promote a culture that helps celebrate and publicize scientists and engineers the same way we do now with athletes and pop stars.

"They very rarely see the connection between the very difficult concepts that are being given in algebra or trigonometry and a useful purpose and until kids can see a connection between why they should work hard to learn something and what benefit it will be to them they're not going to put passion to it," Kamen said.




Time Warner Cable is also building an alliance with the PopTech Community -- a renowned unique innovation network designed to explore how to take classroom lessons and apply them towards helping the entire planet.

"PopTech got started as a place to look at the social impact of technologies not so much about the gadgets but more about what they mean for us -- medicine and health and energy and space travel what do these technologies mean for how we're going to address some of the most pressing problems on earth?" said Andrew Zolli of PopTech.

To learn more about how best to get a child in your life more enthusiastic about helping to solve those problems in fun and interesting ways through science and technology, visit www.connectamillionminds.com.

WIRED

Making Science Cool: “Educate to Innovate”

- By [Chuck Lawton](#) 
- November 24, 2009 |
- 8:00 am |



Students from Oakton High School demonstrating the "Cougar Cannon" (Image: whitehouse.gov)

“We’re going to show young people how cool science can be.”

Those were some of the inspiring words by President Barack Obama at the launching of the new “Educate to Innovate” campaign on Monday this week. This initiative aims to increase science, technology, engineering and mathematics (STEM) literacy amongst students to improve our national standing from average (or in some cases, below average) to the top. \$4.35 billion in Federal grants will be offered to schools who can innovate in STEM education and the private sector is stepping up with an additional \$260 million in related funding and programs.

And this all couldn't come at a better time. [A recent survey by Intel](#) showed that parents would [rather talk to their kids about drugs than math and science](#). And while public and private sector funding is nice to have, one key to this initiative are the innovative new programs that reach out to inspire both kids and parents looking to get more involved. At the start of this campaign, five public private partnerships were announced which vary in terms of content and outreach in an effort to reach the broadest spectrum of young people possible. These include:

- Time Warner Cable, FIRST Robotics and the Coalition for Science After School to [connect students to existing STEM activities in their area](#) through it's website [connectamillionminds.com](#).
- Discovery Communications is [launching a dedicated commercial-free programming block](#) on the Science Channel among other initiatives.
- Sesame Street will be [focusing on STEM content in twenty of the 26 episodes this season](#).
- [National Lab Day](#) is partnering with many philanthropic organizations to improve science labs and build a community around STEM teachers.
- And recognizing the power of games to engage kids, Sony, The Entertainment Software Association and the MacArthur Foundation are [partnering to make STEM-related video games freely available](#) and hosting competitions and prizes for game development.

It's also great to see that the White House will continue to be a platform for increasing visibility on STEM education through hosting events that involve and challenge students to excel. A couple of months ago the [White House held an Astronomy Night](#) that not only focused on stargazing but focused on young students who had made important astronomical discoveries. And going forward there are plans to begin hosting a science fair that showcase national winners. Events like these that focus on and involve students and the important contributions they can make even at an early level can be an inspiration to young people everywhere.

President Obama [has remarked in the past](#) on the importance for families to take an active role in their children's education. John Holdren, Science Advisor to President Obama in a Q&A after the speech, expressed optimism that these initial partnerships, and more to come, will help to bridge the gap between the classroom and the home by getting students excited about STEM education and showcasing careers that are available in these same disciplines.

Part of what makes this exciting is the contrast between "Educate to Innovate" and the purely standards-based "No Child Left Behind" initiative which had similar but broader goals for increasing educational competency. Regardless of where you stand on the merits of NCLB, a focus to improve test scores as the only metric for improvement isn't as engaging or applicable for students as robotics competitions, computer programming in the form of games or other real-world applications of science. And corporations looking for the next wave of top thinkers, [such as Intel](#), now have the ability to get involved.

I spoke about this with a couple of friends who teach high-school science in the Milwaukee area and they both gave me some insight on the implications of these announcements. One teacher is involved in the Milwaukee School of Engineering's [SMART \(Students Modeling a Research](#)

[Topic](#)) program at his school. This program attempts to teach the interplay between science, math, technology and real-world applications. While SMART is an effective methodology, programs such as these are underfunded and he hopes this is an example of innovation that help make additional grants possible. Additionally, just the shift in tone away from standards-based education shows awareness in understanding the plight of urban schools. But there was shared skepticism as well with one teacher saying, "I'll believe it when I have a shiny new Gas Chromatograph in my chemistry classroom."

Regardless, the consensus is that this is a step in the right direction. Additional funding - especially funding tied to merits of new ideas and not just performance - will help foster innovation in how we teach the next generation of kids about math, science, engineering and technology. And these partnerships with the private sector will hopefully succeed in offering additional exposure to students both in the classroom and after school.

And about wanting to show young people how cool science can be? Just [keep bringing the Mythbusters crew to official White House science events](#) and let them do their thing.

View the entire speech and read additional information about "Educate to Innovate" at whitehouse.gov.

President Obama Hopes to Jumpstart Science and Technology Education With New Initiative

Through Educate to Innovate, the White House hopes to return American science and technology learning to prominence

By Danny Freedman and Jeremy Hsu Posted 11.23.2009 at 3:44 pm [13 Comments](#)



Educate to Innovate: Whitehouse.gov

Elmo and Big Bird may represent old school learning compared to video games, but both Sesame Street and video game programmers have joined forces as part of a new White House initiative aimed at promoting science, engineering and math both in and out of the classroom.

Noting that for decades academic achievement among math and science students has been "losing ground" in the U.S., the president said that around the world "there is a hunger for knowledge, an insistence on excellence, a reverence for science and math and technology and learning. That used to be what we were about," he said. "That's what we're going to be about again."

The president also announced an annual science fair at the White House for the winners of national science and tech competitions. Since the NCAA athletics champs get to visit, so too should the nation's mathletes. "Scientists and engineers ought to stand side-by-side with athletes

and entertainers as role models," Obama said. The [genius inventors still in high school](#) we featured earlier this year are surely taking note.

The initiative, dubbed Educate to Innovate, is kicking-off with five public-private partnerships that will be, according to the White House, worth more than \$260 million in funding and in-kind support from a variety of companies and organizations:

- Time Warner Cable, FIRST Robotics, and the Coalition for Science After School have established the website [connectamillionminds.com](#) to help kids and parents find after-school activities in science, tech, engineering and math.
- Discovery Communications, along with partner universities and federal agencies will, among other things, be devoting a block of commercial-free kids programming on Discovery's Science Channel.
- Sesame Street is in the midst of the first of two seasons that will focus on science and math.
- A National Lab Day that musters the on-going help of groups and individuals across scientific realms to support teachers' projects in the classroom. Funded in part by the Hidary Foundation, the MacArthur Foundation, the Bill and Melinda Gates Foundation and others, the White House said the effort aims over the next four years to impact 100,000 teachers and 10 million students.
- The MacArthur Foundation, Sony, the Entertainment Software Association and others in the industry will be holding competitions for the design of free videogames that target math and science, including one that's open only to kids.

We previously looked at a [New York City public school](#) that incorporates *LittleBigPlanet* and other games as part of its learning curriculum, and so seeing video games take a more prominent role in national science education sounds like an intriguing step.

After his speech, two students from a school in nearby Vienna, Va., showed the President a robot they'd built in six weeks, designed to pick up and lob moon rocks. Obama said he was interested in seeing the demo, given the ability of robotics to inspire young minds. "I also want to keep an eye on those robots," he said, "in case they try anything."

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Obama Wants More Scientists, Engineers But Will They Have Jobs?

4:48 pm

November 23, 2009

By Frank James

President Barack Obama, like his predecessors, has made improving science, technology, engineering and math, or STEM, education a priority.

On Monday, he announced a new initiative of his administration called "Educate to Innovate" meant to raise the performance of U.S. students in these areas where they have been lagging behind other nations.

To that end, he announced a new, annual White House science fair to give the accomplishments of young scientists the same high-profile that-a-boy NCAA champions get.

If you win the NCAA championship, you come to the White House. Well, if you're a young person and you've produced the best experiment or design, the best hardware or software, you ought to be recognized for that achievement, too. Scientists and engineers ought to stand side by side with athletes and entertainers as role models, and here at the White House we're going to lead by example. We're going to show young people how cool science can be.

It's hard to argue that U.S. students shouldn't do better at science and math if only because, as Obama said today, a knowledge of these subjects helps critical thinking as well as informed citizenship.

But the push for more and better STEM education, most often grows from the argument that it's important for the U.S. economy's future for the nation to produce more STEM professionals.

Yet, what would it mean if the U.S. produced more engineers or scientists?

Specifically, what would keep U.S. companies from continuing to outsource engineering and [scientific work](#) to STEM professionals abroad, like in India or China, where an engineer or scientist is paid less? This [trend has been happening for years](#).

Wouldn't the U.S. run the risk of producing a lot of scientists and engineers it wouldn't have jobs for?

An excerpt from [*Mechanical Engineering* magazine](#):

Companies have been offshoring manufacturing for decades. Today, however, corporations are sending engineering work abroad as well, by outsourcing work to offshore vendors or assigning it to overseas divisions.

If this is a seismic change in the engineering profession, so far mechanical engineers have only felt the initial tremors. The trend is most pronounced in information technology, computing, and consumer electronics, where U.S., European, and Japanese firms have hired hundreds of thousands of programmers and engineers in China, India, and other developing nations. Computer and cellphone manufacturers increasingly outsource product design and engineering to original design manufacturers in China and Taiwan.

There are some instances when U.S. scientists and engineers are essential, for instance, when the work involved is for the defense industry and requires security clearance.

Sometimes a company wants to prevent its proprietary information from being leaked to a Chinese or Indian company.

A few years ago, a scientist who works for Exxon Mobil explained to me that the reason he still had a job was for that very reason, Exxon Mobil didn't want to risk losing proprietary refinery technology even though it could have hired three Indian engineers for what it was paying him.

But even those concerns aren't enough to stop the flow of engineering jobs to China and India.

Another excerpt from *Mechanical Engineering*:

Despite the need for hands-on engineering at home, automotive work continues to surge offshore. Technology centers support manufacturing operations in China and do R&D in India. General Motors, for example, hired 400 researchers in Bangalore within two and a half years. "If you look at their Internet job postings, they are certainly doing sophisticated research. It's not for the Indian market, but for global markets and the United States," said Martin Kenney, a professor of Human and Community Development at the University of California, Davis.

Given this, doesn't there need to be a robust discussion of what the U.S. would do with more engineers and scientists especially if the long-term trend of so much of the work being sent abroad continues?

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Obama Calls for Annual Science Fair: Achievement Should be Recognized like NCAA Championship Win

November 23, 2009 2:14 PM



ABC News' [Sunlen Miller](#) reports:

In order to show kids “how cool science can be,” President Obama announced today that he will convene an annual science fair starting next year.

The winners of national competitions in science and technology will be annually invited to the White House as a congratulatory event equal to those, the president said, that are normally reserved for sports stars.

“If you win the NCAA championship, you come to the White House. Well, if you're a young person and you've produced the best experiment or design, the best hardware or software, you ought to be recognized for that achievement, too. Scientists and engineers ought to stand side by side with athletes and entertainers as role models, and here at the White House we're going to lead by example. We're going to show young people how cool science can be.”

Today's announcement came hand-in-hand with the “Educate to Innovate” campaign launched by the White House to increase the importance of math and science education in the classroom: with an initial commitment by the private sector of more than \$260 million.

“Students will launch rockets, construct miniature windmills, and get their hands dirty. They'll have the chance to build and create -- and maybe destroy just a little bit -- to see the promise of being the makers of things, and not just the consumers of things.”

The president said that for far too long the United States has lagged behind the rest of the world in developing young minds apt to math and science – and noted that during his trip last week to Asia he was struck by the difference.

Obama recalled that President Lee of South Korea said his bigger challenge in education policy is parents that are too demanding, and the mayor of Shanghai said he had no problem recruiting teachers.

“That gives you a sense of what's happening around the world. There is a hunger for knowledge, an insistence on excellence, a reverence for science and math and technology and learning. That used to be what we were about. That's what we're going to be about again.”

After his remarks, the President watched a demonstration of the “Cougar Cannon” – a device made by students at Oakton High School designed to scoop up and toss moon rocks.

“As President, I believe that robotics can inspire young people to pursue science and engineering. And I also want to keep an eye on those robots, in case they try anything,” Mr. Obama joked.

-Sunlen Miller

November 23, 2009 in [Current Affairs](#), [Education](#), [Obama, Barack](#), [White Ho](#)



Nov 23, 2009

Obama: Math and science are keys to health care, energy, economy

12:19 PM



President Obama and the Cougar Cannon on Monday.

CAPTION

By SAUL LOEB, AFP/Getty Images

President Obama tied a good chunk of his domestic agenda today to better education in math and science.

Those subjects are the gateways to innovations that can improve the health care system, develop new sources of clean energy, and forge a better economy, Obama said during an event that highlighted various education initiatives.

The goal is "reaffirming and strengthening America's role as the world's engine of scientific discovery and technological innovation," Obama said during a ceremony at the Eisenhower Executive Office Building. "And that leadership tomorrow depends on how we educate our students today."

Today's program included a student demonstration of the "Cougar Cannon," a machine designed to pick up and toss moon rocks (to where, we don't know). The crowd included astronaut Sally Ride, other science types, and government officials.

Among the ideas is an annual White House science fair, Obama said, with winners to be treated like championship athletes or award-winning entertainers.

"We're going to show young people how cool science can be," Obama said.
(Posted by David Jackson)