

## 'Competitive' initiative may lack steam

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To revive America's leadership in technology and innovation, President Bush in his State of the Union address proposed multibillion-dollar funding in science and tech research and development, possibly signaling a renewed interest resembling post-Sputnik. But some scholars share mixed feelings saying that it might be just big talk.

The interest in technology and innovation comes as the United States has lost its stand on math and science education and IT exports to economic competitors such as China and India.

It also comes two years after Bush unveiled his technology initiatives for energy, healthcare and broadband technology.

Under the American Competitiveness Initiative, more than \$136 billion over the next 10 years, including \$5.9 billion in 2007, would go to fund research programs, better education and foster public and private tech sectors.

Specifically, it would double federal funding to \$50 billion for physical sciences and engineering and permanently extend the R&D tax credit, costing \$86 billion over the next 10 years.

Scott Wallsten, a resident scholar at the American Enterprise Institute in science and technology policy, says these types of calls are standard, noting that extending the R&D tax credit was also suggested by President Bill Clinton.

"These types of initiatives are great," Wallsten said, "but no one remembers them over the 10 years."

While the president hopes to increase the 2007 budget for Federal research and development by \$5 billion from \$132 billion last year, Wallsten says it's small increase.

And whether funding this project is the answer to competitive edginess is unknown, Wallsten said, but says the federal government will play an important role nonetheless.

"Where money should be spent is hard to say," he said. "Money spent in one place is not going to be spent somewhere else."

Meanwhile, Jim Harper, director of information policy studies at the Cato Institute, believes Bush's State of the Union contains empty promises merely emphasizing a lot of ground plans and spending.

"Markets would benefit more from reducing spending, reducing taxes, and reducing regulations," he said. "Education would help but not of the kind that the president wants. National educational projects are not likely to lead to the needed improvements."

According to Harper, funding for the initiative would better serve in fixing existing healthcare or energy systems than going towards technology to curb these problems.

"Technology cannot cart in front of healthcare like a market horse," he said. "Bush needs to restore a functioning healthcare market, and then technology will fill in where needed."

Harper notes pouring millions in investment into technology geared towards alternative energy will be unnecessary, since a number of private

companies have already been researching energy alternatives; the only problem now lies in making them cost effective.

Rather, he believes a tax cut should be given where it is needed most, allowing taxpayers to decide where their money should go.

But Diana Furchtgott-Roth, director of the Center for Employment Policy at the Hudson Institute, believes the president is on the right track.

"This initiative will keep America ahead," she said.

According to Furchtgott-Roth, the initiative will give incentive to companies researching public good issues as well as foster the education of math and science students that will lead to more interest in majoring math and science at a university level, thereby increasing the number of professionals in the field.

"The president is doing the right thing," she said. "Now, it's up to Congress to follow through."

While research is key, many like Furchtgott-Roth see the education component as vital. The initiative seeks to improve the quality of math, science, and technological education in K-12 schools, which could cost as much as \$380 million.

This would entitle training 70,000 high school teachers to lead advanced math and science courses for low-income students and encouraging up to 30,000 math and science professionals to become adjunct high school teachers over the next eight years.

While this is a good idea, Tom Loveless, a senior fellow at the Brookings Institution whose specialty lies in K-12 education, says middle schools

would benefit the most from this funding as high school level classes like algebra shift to younger students.

"Middle school teachers who teach math don't have adequate knowledge of math," Loveless said. "There is a disconnect between the mathematical background of these teachers and the level of mathematics they are expected to teach."

Many of these teachers do not have a major or minor in math, Loveless says, who mentions a little more than 30 percent of students in middle school are enrolled in an algebra class.

And since qualifications vary state by state, a number of unqualified teachers continue to be certified due to the teaching shortage, he said.

In addition, he notes that federal initiative policies that promote training are not the best answer to helping teachers who don't know math.

Although too early to tell, the tech research industry and educational intuitions will be waiting eagerly to see whether Bush will push such an ambitious initiative and Congress to support it as a measure in expanding the science and mathematical workforce and up the country's IT global leadership.

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