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Now

October 28, 2010

A Need to Improve in Science, Math ...

To the Editor:

I read your Oct. 26 editorial “[48th Is Not a Good Place](#)” with great interest. I agree that improving science, technology, engineering and math education is critical to maintaining our scientific and economic leadership.

We need not only to continue to produce the world’s best scientists and engineers, but also to ensure that every student is prepared for the highly technical, high-paying jobs of the future.

I also agree that Congress does have an important role to play, but rather than stopping there, I offer that the path forward is clear: the Senate needs to approve the reauthorization of the America Competes Act.

The [legislation](#) incorporates the recommendations from the National Academies’ “Rising Above the Gathering Storm” report that you mentioned; it passed by huge margins in 2007 but expired at the end of last month. The reauthorization passed the House in May with bipartisan support and now awaits Senate action.

I am hopeful that this noncontroversial legislation will be approved when Congress returns after the election, but given the environment, no one should take anything for granted. The clock is ticking, the Senate calendar is filling up, and we are facing challenges on a number of fronts.

I strongly encourage all who care about improving science, technology, engineering and math education in this country — including The New York Times — to call on the Senate to pass America Competes.

Bart Gordon
Chairman, House Committee
on Science and Technology
Washington, Oct. 26, 2010

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To the Editor:

There is indeed a crisis in what's come to be known as STEM education — science, technology, engineering and mathematics.

Recently, an impressive array of groups met in Washington to find new ways to reverse this trend. The American Society of Mechanical Engineers has joined many others to advocate for stronger public policy, increased numbers of volunteers working with local educators, and improved career guidance and curricular materials.

We must address this issue comprehensively if we are to inspire the next generation to take up the engineering profession as an ideal way to help make the world a better place.

The field of engineering has the potential to unlock students' imaginations and to make their abstract science and math lessons come to life. In the words of the great engineer and innovator Theodore von Karman, "Scientists discover the world that exists; engineers create the world that never was."

Thomas Loughlin
Executive Director, American
Society of Mechanical Engineers
New York, Oct. 26, 2010

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To the Editor:

As a scientist (Ph.D., molecular biology) and an inventor (several patents) who works at a biotech startup, I think that your idea that there is something wrong with having half of all

patents in the United States awarded to foreign companies, and that we can do something about that, is just silly nostalgia.

The post-World War II era of United States dominance is as over and dead as the Ottoman Empire; nothing will bring it back. We have to learn to live with the fact that universities and companies in other countries are just as innovative as we are, and, since there are a lot of people in Europe and China and India, a substantial fraction of cutting-edge research will occur overseas.

Also, I disagree that American science education is bad; it is education for the poor that is bad. In wealthy suburbs like Newton, Mass., the quality and rigor of the middle- and high-school science classes is world-class (the 10th-grade honors chemistry textbook in the Newton school system is at a higher level than my college textbook).

Ezra S. Abrams

Newton, Mass., Oct. 26, 2010