

THE HILL

Reversing decline in space exploration

By Rep. Pete Olson (R-Texas) - 03/01/10 06:50 PM ET

In responding to the competitive global economy, China and India don't hesitate to encourage their top students to pursue science and math careers.

They know that it is this expertise that will dictate their countries' futures. Unfortunately, these are the careers in which America is losing ground, calling into question our own future.

The problems with U.S. test scores and with recruiting talented teachers in the science, math and engineering fields are well publicized. U.S. students lag well behind their Asian and Indian counterparts, and we risk losing the level of excellence in science research and innovation necessary to meet the needs of the future.

Harvard University and many other top colleges recruit the top Chinese students to be educated here. Why? Because Chinese students are laser-focused on a top education and their test scores reflect that.

Unfortunately, after those students receive the top-tier American education they will return to their home country and we will not benefit from their knowledge. We have students graduating from high school needing remedial math courses to begin college-level math.

We have a shortage of teachers able to inspire young minds. We have de-emphasized the pursuit of solving difficult problems and seem to choose paths of least resistance. While the solutions to those problems may require a great national epiphany, we do see the small but important steps taking place every day across America.

The Johnson Space Center in Houston hosts several programs in which employees volunteer their time to mentor students in math, science and engineering. In Nashville, a coordinated effort between local schools and Vanderbilt University offers free tuition to students who specialize in math and science and go into teaching those subjects.

In California and New York, the "Math for America" (MfA) program is a combination of private and public resources establishing incentives for students to go into math instruction. Participants in the MfA fellowship program earn a master's degree in education and commit to five years of teaching math in public secondary schools. The fellowship also provides a full tuition scholarship and an annual stipend of up to \$100,000 over five years, as well as mentoring and professional development services.

These innovative initiatives encourage and inspire students to become the pathfinders who will show us the way forward. These young leaders will scale greater heights in critical careers that will help develop new technologies in healthcare, science and engineering.

The federal government can actually help in achieving this goal as well. H.R. 705 will provide tax incentives for students who go into elementary education in math, science and technology.

These tax incentives, as well as well-coordinated public-private partnerships, are critical in making up lost ground and encouraging students to pursue degrees and careers in math, science and technology.

There is another opportunity for our nation, through the government, to have a role in this solution. We must fully commit to our nation's human space program.

A robust national space program both maintains our global leadership in human space exploration, and inspires generations of young minds to create the next level of American superiority. China and India are demonstrating their commitment to human space exploration.

As it stands now, President Barack Obama's budget is putting the U.S., the global leader in space exploration, firmly into fourth place. Without a manned space program, we will be forced to pay Russia over \$50 million a person to take our astronauts to the International Space Station and beyond.

The United States has been a beacon of cutting-edge technology when it comes to pioneering the path in science and space exploration. We were the first to set foot on the moon because we made a national commitment to being first and being the best.

That's what America does. We must continue that investment so our next generation reaps the benefits of excellence in science, math and engineering.

Human space exploration is an important part of that national plan. There is still time to correct our national decline in both education and space exploration. They go hand in hand. It requires a national commitment — both public and private. That's America at its best and that's what will keep us on top.

Olson serves on the House Science and Technology Committee.

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