

## **The Future of Science in America**

American society has historically welcomed scientific advances, and generations of Americans have looked to scientists to make their lives better. From founding fathers like Benjamin Franklin to independent inventors like Edison, Bell, and Whitney, America has been just as much an intellectual frontier as it has been a political or geographic frontier. Industrialists like Henry Ford used the technologies developed in America and other nations to assemble a loyal workforce, made up of Americans and immigrants who saw America as a land of opportunity. Science, freethinking, and a competitive economy have brought America to the top in terms of quality of life for its people. Yet it seems this greatness may be wearing away very quickly.

Recent studies show that fewer and fewer Americans are getting college degrees in science and math. An article in *Time* magazine's February 13, 2006 issue mentioned several of these studies, and pointed out that this trend is not happening worldwide. In many other countries more young people are getting advanced degrees in those fields. European nations, as well as China and India, are now turning out large numbers of scientists, and are attracting the brightest students from around the world to work in their countries. The authors of these studies generally believe that if this trend continues, the United States will no longer be the world leader in scientific advancement.

A number of reasons may help to explain why the United States is losing its position as the world leader in science and technology. For one thing, a great deal of modern science is so expensive to conduct that governments need to be involved in funding science education and

scientific research. While other governments around the world have come to realize this, Americans have wasted their votes by electing people who play to their superstitions and stereotypes. Our government tries to silence scientists who disagree with their political positions. According to an article in the *New York Times* about Dr James Hansen, the top climate scientist at NASA, “the Bush administration has tried to stop him from speaking out since he gave a lecture last month calling for prompt reductions in emissions of greenhouse gases linked to global warming.” The *Time* magazine article says that researchers find themselves “at odds with religious, ideological or corporate interests” and often end up being “discounted, distorted or quashed by Bush administration appointees.” Since 2004, more than 8000 scientists have signed a letter protesting the misuse of science by George Bush’s administration, and yet the average American voter doesn’t know or seem to care.

Also, Americans are strongly influenced by the news and entertainment media, two sources of information that often do not hold scientists in a high regard. “Mad” scientists and “absent-minded” professors are often seen in movies. In *The World is Flat*, author Thomas Friedman says, “In China today, Bill Gates is Britney Spears. In America today, Britney Spears is Britney Spears- and that is our problem.”

It is also true that companies have recently been able to take their production lines to other countries, where costs like salaries, rent and electricity are lower. The company’s profits go up as opportunities for American workers go down. American students do not have to be part of their process any longer. Political decisions made here encourage corporations to turn their backs on Americans, and our ignorant population doesn’t realize that they’ve been abandoned.

What does it matter if Americans fall behind the rest of the world in education? Well,

according to the National Center for Public Policy and Higher Education, “a drop in the average level of education of U.S. workers would depress personal income levels for Americans, in turn creating a corresponding decrease in the nation’s tax base.” That means, basically that America is on its way to becoming a poorer nation unless things change. It is the responsibility of the public to encourage more students to think about becoming scientists, but first the public must make sure that American companies and our government will provide a place for those skills to be used. The public must put America on a different course for the future.

One step in reversing the trend might be to encourage American companies to use more highly educated Americans rather than taking all the technical jobs overseas, even if it means lower profits for the corporation and more money for the workers. Keeping more of those jobs here would be one way to encourage students to pursue a career in science. Americans also need to end the growing stereotype that scientists are either nerds or insane, because that is not at all encouraging to the average student. A higher average salary would also boost the number of science majors in America, and so would giving out more science scholarships to leading colleges. All of these factors would motivate me to pursue a career in science.

America seems to be losing its place as a world leader in science and technology. In order to keep up the standard of living that its people have become used to and to attract the best people from other nations to study and work here, the American people will have to start paying better attention to the things that are happening to their country. As Dr. Hansen states in the *New York Times* article, "the foundation of a democracy is an informed public, which obviously means an honestly informed public. That's the big issue here."

Bibliography

Friedman, Thomas, The World is Flat. New York; Farrar, Straus & Giroux, 2005

“Income of US Workforce Projected to Decline if Education Doesn’t Improve.” November, 2005. National Center for Policy and Higher Education. February 22, 2006  
<[http://www.highereducation.org/reports/pa\\_decline/index.shtml](http://www.highereducation.org/reports/pa_decline/index.shtml) >.

Lemonick, Michael D. “Are We Losing Our Edge.” Time. February 13, 2006

Parker, James. “Science in Crisis.” March 1, 2006. ParkersGreenboard.com. March 2, 2006  
<<http://www.parkersgreenboard.com/Science%20in%20crisis.htm> >.

Revkin, Andrew C. “Climate Expert Says NASA Tried to Silence Him.” New York Times.  
January 29, 2006

“Statement of Scientific Integrity.” February 20, 2006. Union of Concerned Scientists. February 22, 2006 <[http://go.ucsusa.org/RSI\\_list/](http://go.ucsusa.org/RSI_list/)>.

Tumulty, Karen and Thompson, Mark. “The Political Science Test.” Time. February 13, 2006