

Keeping Us in the Race

By Thomas L. Friedman, New York Times, Oct. 14, 2005

What if we were really having a national discussion about what is most important to the country today and on the minds of most parents?

I have no doubt that it would be a loud, noisy dinner-table conversation about why so many U.S. manufacturers are moving abroad - not just to find lower wages, but to find smarter workers, better infrastructure and cheaper health care. It would be about why in Germany, 36 percent of undergrads receive degrees in science and engineering; in China, 59 percent; in Japan, 66 percent; and in America, only 32 percent. It would be about why Japanese on bullet trains can get access to the Internet with cellphones, and Americans get their cellphone service interrupted five minutes from home.

It would be about why U.S. 12th graders recently performed below the international average for 21 countries in math and science, and it would be about why, in recent years, U.S. industry appears to have spent more on lawsuits than on R.&D. Yes, we'd be talking about why the world is racing us to the top, not the bottom, and why we are quietly falling behind.

And late in the evening, as the wine bottles emptied, someone at the national dinner table might finally say: "Hey, what if we were really thinking ahead? What if we asked some of the country's best minds to make a list of the steps we could take right now to enhance America's technology base?"

Fortunately, two senators, Lamar Alexander and Jeff Bingaman, asked the National Academy of Sciences, the National Academy of Engineering and the Institute of Medicine to form a bipartisan study group to produce just such a list, which was released on Wednesday in a report called "Rising Above the Gathering Storm."

Because of globalization, the report begins, U.S. "workers in virtually every sector must now face competitors who live just a mouse-click away in Ireland, Finland, India or dozens of other nations whose economies are growing. ... Having reviewed the trends in the United States and abroad, the committee is deeply concerned that the scientific and technical building blocks of our economic leadership are eroding at a time when many other nations are gathering strength. ... We are worried about the future prosperity of the United States. ... We fear the abruptness with which a lead in science and technology can be lost and the difficulty of recovering a lead once lost - if indeed it can be regained at all."

The report's key recommendations? Nothing fancy. Charles Vest, the former president of M.I.T., summed them up: "We need to get back to basic blocking and tackling" - educating more Americans in the skills needed for 21st-century jobs.

Among the top priorities, the report says, should be these:

(1) Annually recruiting 10,000 science and math teachers by awarding four-year merit-based scholarships, to be paid back through five years of K-12 public school teaching. (We have too many unqualified science and math teachers.)

(2) Strengthening the math and science skills of 250,000 other teachers through extracurricular programs.

(3) Creating opportunities and incentives for many more middle school and high school students to take advanced math and science courses, by offering, among other things, \$100 mini-scholarships for success in exams, and creating more specialty math-and-science schools.

(4) Increasing federal investment in long-term basic research by 10 percent a year over the next seven years.

(5) Annually providing research grants of \$500,000 each, payable over five years, to 200 of America's most outstanding young researchers.

(6) Creating a new Advanced Research Projects Agency in the Energy Department to support "creative out-of-the-box transformational energy research that industry by itself cannot or will not support and in which risk may be high, but success would provide dramatic benefits for the nation."

(7) Granting automatic one-year visa extensions to foreign students in the U.S. who receive doctorates in science, engineering or math so they can seek employment here, and creating 5,000 National Science Foundation-administered graduate fellowships to increase the number of U.S. citizens earning doctoral degrees in fields of "national need." (See the rest at www.nationalacademies.org.)

These proposals are the new New Deal urgently called for by our times. This is where President Bush should have focused his second term, instead of squandering it on a silly, ideological jag called Social Security privatization. Because, as this report concludes, "Without a renewed effort to bolster the foundations of our competitiveness, we can expect to lose our privileged position."