
Education Week

**Education and the Economy:
If We're So Dumb, Why Are We So Rich?**

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Once again a set of major international assessments shows American students lagging in international performance in mathematics and science. In math, the 2003 Trends in International Mathematics and Science Study, or TIMSS, ranked our 4th graders 14th out of 25 participating nations. We did better in science, outperforming 16 of the 24 other, mostly European and Asian, nations. The 2003 Program for International Student Assessment, or PISA, shows that about two-thirds of the other nations surveyed outperformed American students.

The PISA study is the latest in a steady drumbeat of reports on how American students aren't measuring up globally. And it looks as though we aren't gaining ground. Most disappointing in the 2003 TIMSS and PISA assessments, was that there was no real improvement since the tests were taken in the 1990s, despite our aggressive emphasis on standards-based reform and a huge increase in the share of students taking math, science, and other more rigorous courses. And it is not just K-12 education. Other indicators from the Organization for Economic Cooperation and Development show that we have slipped from No. 1 to No. 4 in postsecondary attainment.

Cause for concern? You bet. You don't have to have the math scores of a rocket scientist to know that in the new high-tech economic world, math and science education is a key asset in global competition.

But wait a minute. If we're so dumb, why are we so rich? What explains America's remarkable economic performance in the face of educational failure? To put it bluntly, if America's so bad at math and science, how come we're so successful in the new high-tech global economy?

Just look at the numbers.

global economies. The European and Japanese versions of highly planned economies surged in the 1970s, but lost out to American flexibility in the 1980s.

Eventually, our competitors will narrow our economic lead as they learn how to create their own versions of agility and scale. At that point, the competition will really come down to who has the best human capital—especially in a world where people are still nation-bound, and technology and financial capital ignore national boundaries as they hop across borders from one entrepreneurial opportunity to the next.

The Europeans already have first-rate technology and human capital, and they are trying to build scale through the European Union. They are trying to become more agile with a slow but steady deregulation of their markets for skilled labor. Japanese technology is superb, and the Japanese are struggling with agility as well. Their maverick prime minister, Junichiro Koizumi, won because he promised to shake up Japan's "static" economic and education systems.

Less developed nations also are trying to move up in the race and will become real competitors very soon. Nations like China and India certainly have scale. The Chinese economy is still inflexible, but it is opening up to market reforms slowly, while steadily growing its human and machine capital. Most economists agree that first India, and then China, will surpass us in overall economic output in the foreseeable future. And the quality of the Chinese, Indian, and Eastern European workforces has already grown to the point where those countries have become havens for outsourcing even our most skilled jobs.

Nor does demography favor America in the competitive race. After growing by more than 50 percent between 1980 and 2000, the American workforce will grow by only 17 percent between 2000 and 2020, as the baby boom retires. Tight markets for skilled labor are inevitable. The share of American workers with at least some college increased by 20 percent between 1980 and 2000, but is projected to increase by less than 4 percent between 2000 and 2020.

Of course, we could stop the boomers from retiring, go offshore, or turn to skill-based immigration to solve our problem. But these are political nonstarters. Technology might substitute for the missing skilled labor. But that's just the economists' version of magical thinking. Besides, with half-a-trillion-dollar deficits, public borrowing will surely crowd out private technology investments.

At some point, if we are to retain the lead in the global economic race, we will have to rely on our homegrown and homebound human capital for our competitive edge. Eventually, we will have to close the education gap between our competition and ourselves. Eventually, holding our lead in the global economic race depends on our ability to move up in the global education race.

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Vol. 24, Issue 21, Pages 40-41, 52