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## U.S. Schools Are Still Ahead—Way Ahead

America's alarm about international rankings of students overlooks some critical components of our education system, Vivek Wadhwa says

By [Vivek Wadhwa](#)

America has an inferiority complex about its education system. You hear the sirens every year, when the OECD Program for International Student Assessment ([PISA](#)) releases its annual test results. Finland, South Korea, and Singapore usually come out on top; we start blaming our K-12 teachers for not teaching enough mathematics and science; we begin worrying about the millions of engineers and scientists China and India graduate.

This year the big surprise was that Shanghai garnered first place in the PISA rankings. Then *The Wall Street Journal* ran a story on the home page of its website titled "[Why Chinese Mothers Are Superior.](#)" The *Journal* article claimed that Chinese (and Korean, Indian, etc.) parents raise "stereotypically successful kids"—math whizzes and music prodigies. They do this by *not* allowing their children to attend sleepovers; have a playdate; be in a school play; complain about not being in a school play; watch TV or play computer games; choose their own extracurricular activities; get any grade less than an A; not be the No. 1 student in every subject except gym and drama. The article went on to recount as typical a series of acts that would be considered child abuse in the U.S. (and aren't the norm in India and China).

The *Journal* article was simply bizarre, yet it is true that education in China and India is very challenging and fiercely competitive. Children are brought up to believe that education is everything, that it will make the difference between success and starvation. So from their early years they work long and hard. Most of their childhood is spent memorizing books on advanced subjects.

### AMERICAN STEREOTYPES

Meanwhile, the perception is that American children live a relatively easy life and coast their way through school. They don't do any more homework than they have to; they spend an extraordinary amount of time playing games, socializing on the Internet, text-messaging each other; they work part time to pay for their schooling and social habits. And they party. A lot. These stereotypes worry many Americans. They believe the American education system puts the country at a great disadvantage. But this is far from true.

The independence and social skills American children develop give them a huge advantage when they join the workforce. They learn to experiment, challenge norms, and take risks. They can think for themselves, and they can innovate. This is why America remains the world leader in innovation; why Chinese and Indians invest their life savings to send their children to expensive U.S. schools when they can. India and China are changing, and as the next generations of students become like American ones, they too are [beginning](#) to innovate. So far, their education systems have held them back.

My research team at Duke looked in depth at the engineering education of China and India. We [documented](#) that these

countries now graduate four to seven times as many engineers as does the U.S. The quality of these engineers, however, is so poor that most are not fit to work as engineers; their system of rote learning handicaps those who do get jobs, so it takes two to three years for them to achieve the same productivity as fresh American graduates. As a result, significant proportions of China's engineering graduates end up working on factory floors and Indian industry has to spend large sums of money [retraining](#) its employees. After four or five years in the workforce, Indians do become innovative and produce, overall, at the same quality as Americans, but they lose a valuable two to three years in their retraining.

## RANKINGS RECONSIDERED

And then there is the matter of the PISA rankings that supposedly show the U.S. trailing the rest of the world. Hal Salzman, a professor at Rutgers' John J. Heidrich Center for Workforce Development, debunked myths about these in a May 2008 [article](#) in *Nature* magazine. Salzman noted that international tests use different sampling criteria from country to country, so we're not always comparing apples to apples. As well, the tests compare select populations of small countries such as Singapore and Finland, which each have about 5 million people, with the U.S., which has 310 million. These countries achieve the top rankings on the PISA list. Compare these countries to similar-sized U.S. states, however, and you find that some of those states, including Massachusetts (population 6.5 million), produce the top students. Additionally, we're comparing America's diverse population—which includes disadvantaged minorities and unskilled immigrants with little education—with the homogeneous populations of countries like Finland, Japan, and New Zealand.

Much is made of the PISA test scores and rankings, but the international differences are actually quite small. Most of the U.S. ranking lags are not even statistically significant. The U.S. falls in the second rank on some measures and into the first on others. It produces more highest-performing students in science and reading than any other country does; in mathematics, it is second only to Japan. Moreover, one has to ask what the test results actually mean in the real world. Do high PISA rankings make students more likely to invent the next iPad? Google ([GOOG](#))? I don't think so.

Let's keep improving our education system and focus, in particular, on disadvantaged groups. Education is the future of our nation. But let's get over our inferiority complex. America is second to none. Rather than in mastery of facts learned by rote and great numbers of accomplished martinets, its strength lies in the diversity and innovation that arise in an open, creative society.

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