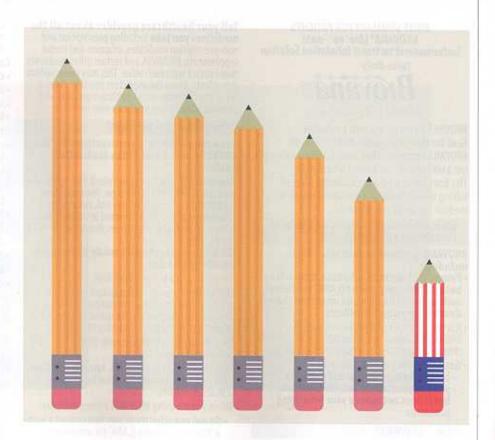


Education is the engine of social mobility, and it's sputtering. Americans have two options: improve our schools or accept a lower standard of living

By Fareed Zakaria



OR THE PAST MONTH, WE HAVE ALL marveled at the life of Steve Jobs, the adopted son of working class parents, who dropped out of college and became one of the great technologists and businessmen of our time. How did he do it? He was, of course, an extraordinary individual, and that explains much of his success, but his environment might also have played a role. Part of the environment was education. And it is worth noting that Jobs got a great secondary education. The school he attended, Homestead High in Cupertino, Calif., was a first-rate public school that gave him a grounding in both the liberal arts and technology. It did the same for Steve Wozniak, the more technically oriented co-founder of Apple Computer. whom Jobs met at that same school.

In 1972, the year Jobs graduated, California's public schools were the envy of the world. They were generally rated the finest in the country, well funded and well run, with excellent teachers. These schools were engines of social mobility that took people like Jobs and Wozniak and gave them an educational grounding that helped them rise.

Today, California's public schools are a disaster, beset by dysfunction and disrepair. They rank at the bottom of the country, just as the U.S. now sits at the bottom of the industrialized world by most measures of educational achievement. The World Economic Forum ranks the U.S.'s

educational system 26th in the world, well behind those of countries like Germany, Finland, the Netherlands, Denmark, Canada and Singapore, In science and math, we score even worse.

We've been talking about America's education decline for three decades now, so much so that we are numbed by the discussion. But the consequences of that crisis are only just becoming fully apparent. As American education has collapsed, the median wages of the American worker have stagnated, and social mobility-the beating heart of the American dreamhas slowed to a standstill. Education is and always has been the fastest way up the socioeconomic ladder. And the payoff from a good education remains evident even in this weak recovery. The unemployment rate for college graduates is just 4%, but for high school dropouts it is 14%. If you drop out of high school and the U.S. has a 25% dropout rate-you will have a depressed standard of living for the rest of your life.

The need for better education for most Americans has never been more urgent. While we have been sleeping, the rest of the world has been upgrading its skills. Countries in Europe and Asia have worked hard to increase their college-graduation rates, while the U.S.'s—once the world's highest—has flatlined. Other countries have focused on math and science, while in America degrees have proliferated in "fields" like sports exercise and leisure studies.

An Educated Workforce

Bill Gross, the head of Pimco, the world's largest bond fund, sums it up in no uncertain terms: "Our labor force is too expensive and poorly educated for today's marketplace." There are two variables here: our educational levels, which are low, and our wages, which are high. Either we will raise our educational level or markets will lower our wages.

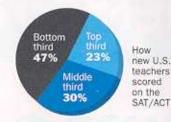
How to do it? Well, there is one simple, time-tested method. Work harder. Thomas Edison said that genius is 1% inspiration and 99% perspiration. Malcolm Gladwell found that behind many supposedly natural-born talents like musical ability lay lots of practice—by his calculations, about 10,000 hours of practice. U.S. school-children spend less time in school than their peers abroad. They have shorter school days and a shorter school year. Children in South Korea will spend almost two years more in school than Americans by the end of high school. Is it really so strange that they score higher on tests?

If South Korea teaches the importance of hard work, Finland teaches another lesson. Finnish students score near the very top on international tests, yet they do not follow the Asian model of study, study and more study. Instead they start school a year later than in most countries, emphasize creative work and shun tests for most of the year. But Finland has great teachers, who are paid well and treated with the same professional respect that is accorded to doctors and lawyers. They are found and developed through an extremely competitive and rigorous process. All teachers are required to have master's degrees, and only 1 in 10 applicants is accepted to the country's teacher-training programs. The contrast with the U.S. is stark. Half of America's teachers graduated in the bottom third of their college class.

Bill Gates has spent about \$5 billion trying to research and reform American education. I asked him, if he were running a school district and could wave a magic wand, what he would do. His response hire the best teachers. That's what produces the best results for students, more than class size or money or curriculum. "So the basic research into great teaching, that's now become our biggest investment," he says. One study estimates that if black students had a top-quartile teacher rather than a bottom-quartile teacher four years in a row, that would be enough to close the black-white test-score gap.

There are many more ideas, many of them worthwhile and worth trying, but you can get lost in the details of the education debate. These two seem simple—work

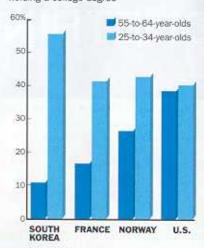
Not Making the Grade



26th

Global rank of the U.S. educational system

Percentage of each age group holding a college degree



Sources: McKinsey & Co.: World Economic Forum; the College Board

more and get better teachers. Yet implementing them is anything but simple. They bump up against an education system that is deeply resistant to change and teachers' unions that jealously guard their prerogatives. All the specific measures that would allow students to work more and good teachers to be identified and rewarded—more days, longer hours, merit pay—are mostly opposed by the teachers' unions and other guardians of the status quo.

When you get depressed by the obstacles to reforming the educational bureaucracy, you can get excited by the meta-reformers on the outside who are trying to revolutionize the system.

Take Sal Khan, who accidentally created what might well be a new way of teaching. Seven years ago, the MIT graduate was helping his cousin, who lived across the U.S., with her math homework. When scheduling got difficult, a friend suggested he put

the diagrams and equations he had drawn on YouTube so she could access them. Five years later, Khan has produced 3,000 videos teaching mostly math and science that have been viewed 80 million times!

But the real revolution has been in the classroom. Last year, Los Altos, Calif., decided to use the Khan Academy videos and software in its public-school classrooms. Doing so turns the educational model on its head. In the traditional method, students sit in class and receive information from their teacher while they busily take notes-a passive process that wastes valuable classroom time. They do the most challenging work-solving problems-at home without help. Under the new system, they watch the Khan Academy videos at home and solve problems in class, where the teacher's talents can be put to use most fruitfully. In addition, students can learn at their own pace—rewatching videosuntil they actually understand the material. The early results show huge leaps in student skills. Technology is being used to create a customized, interactive education that is both novel and powerful.

The reason that I am so taken by the Khan Academy—other than that I have used its videos with my 12-year-old son—is that it is a quintessentially American innovation, a new way of thinking about education.

I went through the Asian educational system, which is now so admired. It gave me an impressive base of knowledge and taught me how to study hard and fast. But when I got to the U.S. for college, I found that it had not trained me that well to think. American education at its best teaches you how to solve problems, truly understand the material, question authority, think for yourself and be creative. It teaches you to learn what you love and to love learning. These are incredibly important values, and they are why the U.S. has been able to maintain an edge in creative industries and innovation in general.

The U.S. should truly fix its educational system by emphasizing the basics—like hard work—again but also by renewing its distinctly American character. We will succeed not by becoming more Asian but by becoming, as the writer James Fallows put it once, "more like us." That's what made America the world's most dynamic society—and it can make it so again.

Watch Fareed Zakaria's CNN special, Restoring the American Dream: Fixing Education, Sunday, Nov. 6, at 8 p.m. and 11 p.m. ET