NINE

This Is Not a Test

We have the power to shape the civilization that we want. But we need your will, your labor, your hearts, if we are to build that kind of society. Those who came to this land sought to build more than just a new country. They sought a new world. So I have come here today to your campus to say that you can make their vision our reality. So let us from this moment begin our work so that in the future men will look back and say: It was then, after a long and weary way, that man turned the exploits of his genius to the full enrichment of his life.

—"Great Society" speech, Lyndon B. Johnson, 1964

Most politicians here don't know the difference between a server and a waiter. That's why kids in South Korea have better Internet access than kids in the south Bronx.

—Andrew Rasiej, candidate in 2005 for New York City's office of public advocate, trying to run on a platform focused on upgrading New York City's IT infrastructure (he was not elected)

As a person who grew up during the Cold War, I'll always remember driving along down the highway and listening to the radio, when suddenly the music would stop and a grim-voiced announcer would come on the air and say, "This is a test of the Emergency Broadcast System," and then there would be a thirty-second high-pitched siren sound. Fortunately, we never had to live through a moment in the

Cold War where the announcer came on and said, "This is not a test." That, however, is exactly what I want to say here: *This is not a test.*

The long-term opportunities and challenges that the flattening of the world puts before the United States are profound. Therefore, our ability to get by doing things the way we've been doing them—which is to say, not always tending to our secret sauce and enriching it—will not suffice anymore. "For a country as wealthy as we are, it is amazing how little we are doing to enhance our natural competitiveness," said Dinakar Singh, the Indian-American hedge fund manager. "We are in a world that has a system that now allows convergence among many billions of people, and we had better step back and figure out what it means. It would be a nice coincidence if all the things that were true before are still true now—but there are quite a few things you actually need to do differently . . . You need to have a much more thoughtful national discussion."

If this moment has any parallel in American history, it is the height of the Cold War, around 1957, when the Soviet Union leaped ahead of America in the space race by putting up the Sputnik satellite. Yes, there are many differences between that age and our own. The main challenge then came from those who wanted to put up walls; the main challenge to America today comes from the fact that all the walls are being taken down, and other countries can now compete with us much more directly. The main challenge in that world was from those practicing extreme communism, namely, Russia, China, and North Korea. The main challenge to America today is from those practicing extreme capitalism, namely, China, India, and South Korea. The main objective in that era was building a strong state; the main objective in this era is building strong individuals.

What this era has in common with the Cold War era, though, is that meeting the challenges of flatism requires as comprehensive, energetic, and focused a response as did meeting the challenge of communism. It requires our own version of the New Frontier and Great Society adapted to the age of flatness. It requires a president who can summon the nation to get smarter and study harder in science, math, and engineering in order to reach the new frontiers of knowledge that the flat world is rapidly opening up and pushing out. And it requires a Great Society that commits our government to building the infrastructure, safety nets, and insti-

tutions that will help every American become more employable in an age when no one can be guaranteed lifetime employment. I call my own version of this approach "compassionate flatism."

Getting Americans to rally around compassionate flatism is much more difficult than getting them to rally around anticommunism. "National peril is a lot easier to convey than individual peril," noted Johns Hopkins University foreign policy expert Michael Mandelbaum. Economics, as noted, is not like war, because economics can always be a win-win game. But sometimes I wish economics were more like war. In the Cold War, we actually got to see the Soviets parade their missiles in Red Square. We all got to be scared together, from one end of the country to the other, and all our politicians had to be focused and serious about marshaling the resources and educational programs to make sure Americans could keep pace with the Soviet Union.

But today, alas, there is no missile threat coming from India. The "hotline," which used to connect the Kremlin with the White House, has been replaced by the "help line," which connects everyone in America to call centers in Bangalore. While the other end of the hotline might have had Leonid Brezhnev threatening nuclear war, the other end of the help line just has a soft voice eager to help you sort out your AOL bill or collaborate with you on a new piece of software. No, that voice has none of the menace of Nikita Khrushchev pounding a shoe on the table at the UN, and it has none of the sinister snarl of the bad guys in *From Russia with Love*. There is no Boris or Natasha saying, "We will bury you" in a thick Russian accent. No, that voice on the help line just has a friendly Indian lilt that masks any sense of threat or challenge. It simply says, "Hello, my name is Rajiv. Can I help you?"

No, Rajiv, actually, you can't.

When it comes to responding to the challenges of the flat world, there is no help line we can call. We have to dig into ourselves. We in America have all the tools to do that, as I argued in Chapter 7. But, as I argued in Chapter 8, we have not been tending to those tools as we should. Hence, our quiet crisis. The assumption that because America's economy has dominated the world for more than a century, it will and must always be that way is as dangerous an illusion today as the illusion

that America would always dominate in science and technology was back in 1950. But this is not going to be easy. Getting our society up to speed for a flat world is going to be extremely painstaking. We are going to have to start doing a lot of things differently. It is going to take the sort of focus and national will that President John F. Kennedy called for in his famous May 25, 1961, speech to Congress on "urgent national needs." At that time, America was recovering from the twin shocks of Sputnik and the Soviet space launch of a cosmonaut, Yuri Gagarin, less than two months before Kennedy's speech. Kennedy knew that while America had enormous human and institutional assets—far more than the Soviet Union—they were not being fully utilized.

"I believe we possess all the resources and talents necessary," said President Kennedy. "But the facts of the matter are that we have never made the national decisions or marshaled the national resources required for such leadership. We have never specified long-range goals on an urgent time schedule, or managed our resources and our time so as to ensure their fulfillment." After then laying out his whole program for putting a man on the moon within ten years, President Kennedy added, "Let it be clear that I am asking the Congress and the country to accept a firm commitment to a new course of action, a course which will last for many years and carry very heavy costs . . . This decision demands a major national commitment of scientific and technical manpower, materiel and facilities, and the possibility of their diversion from other important activities where they are already thinly spread. It means a degree of dedication, organization and discipline which have not always characterized our research and development efforts."

In that speech, Kennedy made a vow that has amazing resonance today: "I am therefore transmitting to the Congress a new Manpower Development and Training program, to train or retrain several hundred thousand workers, particularly in those areas where we have seen chronic unemployment as a result of technological factors, in new occupational skills over a four-year period—in order to replace those skills made obsolete by automation and industrial change with the new skills which the new processes demand."

Amen. We too have to do things differently. We are going to have to

sort out what to keep, what to discard, what to adapt, what to adopt, where to redouble our efforts, and where to intensify our focus. That is what this chapter is about. This is just an intuition, but the flattening of the world is going to be hugely disruptive to both traditional and developed societies. The weak will fall further behind faster. The traditional will feel the force of modernization much more profoundly. The new will get turned into old quicker. The developed will be challenged by the underdeveloped much more profoundly. I worry, because so much political stability is built on economic stability, and economic stability is not going to be a feature of the flat world. Add it all up and you can see that the disruptions are going to come faster and harder. No one is immune—not me, not you, not Microsoft. We are entering an era of creative destruction on steroids. Dealing with flatism is going to be a challenge of a whole new dimension, even if your country has a strategy. But if you don't have a strategy at all . . . well, again, you've been warned.

This is not a test.

Being an American, I am especially concerned about my own country. How do we go about maximizing the benefits and opportunities of the flat world, and providing protection for those who have difficulty with the transition? Some will offer traditional conservative responses; some will offer traditional liberal ones. I offer compassionate flatism. Compassionate flatism is my definition of what it means to be a progressive in a flat world. I start with the assumption that, barring some geopolitical explosion, the world is going to get more and more globalized and flattened, as surely as dawn will follow dusk. The job of government and politicians in such a flattening world is more important than ever. It is to embrace globalization and understand that a fairer, more compassionate, and more egalitarian society lies in a web of policies aimed not at strengthening the old welfare state—or in abolishing it and just letting the market rip—but at reconfiguring it to give more Americans the outlook, education, skills, and safety nets they will need to compete against other individuals in the flat world. That is what compassionate flatism stands for, and it is built around five action areas: leadership, muscle building, cushioning, social activism, and parenting.

Leadership

The job of the politician in America, whether at the local, state, or national level, should be, in good part, to help educate and explain to people what world they are living in and what they need to do if they want to thrive within it. One problem we have today, though, is that so many American politicians don't seem to have a clue about the flat world. As venture capitalist John Doerr once remarked to me, "You talk to the leadership in China, and they are all the engineers, and they get what is going on immediately. The Americans don't, because they're all lawyers." Added Bill Gates, "The Chinese have risk taking down, hard work down, education, and when you meet with Chinese politicians, they are all scientists and engineers. You can have a numeric discussion with them—you are never discussing 'give me a one-liner to embarrass [my political rivals] with.' You are meeting with an intelligent bureaucracy."

When China's prime minister, Wen Jiabao, visited India for the first time in April 2005, he didn't fly into the capital, New Delhi—as foreign leaders usually do. He flew directly from Beijing to Bangalore—for a tech-tour—and then went on to New Delhi. No U.S. president or vice president has ever visited Bangalore. I am not saying we should require all politicians to hold engineering degrees, but it would be helpful if they had a basic understanding of the forces that are flattening the world, were able to educate constituents about them and galvanize a response. We have way too many politicians in America today who seem to do the opposite. They seem to go out of their way actually to make their constituents stupid—encouraging them to believe that certain jobs are "American jobs" and can be protected from foreign competition, or that because America has always dominated economically in our lifetimes it always will, or that compassion should be equated with protectionism. It is hard to have an American national strategy for dealing with flatism if people won't even acknowledge that there is an education gap emerging and that there is an ambition gap emerging and that we are in a quiet crisis. For instance, of all the policy choices that the Republican-led Congress could have made in forging the FY 2005 budget, how in the

world could it have decided to cut the funding of the National Science Foundation by more than $100 million?

We need politicians who are able and willing to both explain and inspire. And what they most need to explain to Americans is pretty much what Lou Gerstner explained to the workforce of IBM when he took over as chairman in 1993, when the company was losing billions of dollars. At the time, IBM was facing a near-death experience owing to its failure to adapt to and capitalize on the business computing market that it invented. IBM got arrogant. It had built its whole franchise around helping customers solve problems. But after a while it stopped listening to its customers. It thought it didn't have to. And when IBM stopped listening to its customers, it stopped creating value that mattered for its customers, and that had been the whole strength of its business. A friend of mine who worked at IBM back then told me that when he was in his first year at the company and taking an internal course, his IBM instructor boasted to him that IBM was such a great company, it could do "extraordinary things with just average people." As the world started to flatten, though, IBM found that it could not continue thriving with an overabundance of average people working for a company that had stopped being a good listener.

But when a company is the pioneer, the vanguard, the top dog, the crown jewel, it is hard to look in the mirror and tell itself it is in a not-so-quiet crisis and better start to make a new history or become history. Gerstner decided that he would be that mirror. He told IBM it was ugly and that a strategy built largely around designing and selling computers—rather than the services and strategies to get the most out of those computers for each customer—didn't make sense. Needless to say, this was a shock for IBMers.

"Transformation of an enterprise begins with a sense of crisis or urgency," Gerstner told students at Harvard Business School, in a December 9, 2002, talk. "No institution will go through fundamental change unless it believes it is in deep trouble and needs to do something different to survive." It is impossible to ignore the parallel with America as a whole in the early twenty-first century.

When Lou Gerstner came in, one of the first things he did was replace the notion of lifetime employment with the notion of lifetime employability. A friend of mine, Alex Attal, a French-born software engineer who was working for IBM at the time, described the shift this way: "Instead of IBM giving you a guarantee that you will be employed, you had to guarantee that you could stay employable. The company would give you the framework, but you had to build it yourself. It's all about adapting. I was head of sales for IBM France at the time. It was the mid-nineties. I told my people that in the old days [the concept of] lifetime employment was only a company's responsibility, not a personal responsibility. But once we move to a model of employability, that becomes a shared responsibility. The company will give you access to knowledge, but you have to take advantage of it . . . You have to build the skills because it will be you against a lot of other people."

When Gerstner started to change the paradigm at IBM, he kept stressing the issue of individual empowerment. Said Attal, "He understood that an extraordinary company could only be built on a critical mass of extraordinary people."

As at IBM, so in America. Average Joe has to become special, specialized, synthesizing, or adaptable Joe. The job of government and business is not to guarantee anyone a lifetime job—those days are over. That social contract has been ripped up with the flattening of the world. What government can and must guarantee people is the chance to make themselves more employable. We don't want America to be to the world what IBM was becoming to the computer industry in the 1980s: the people who opened the field and then became too timid, arrogant, and ordinary to play on it. We want America to be the born-again IBM.

Explaining a new challenge, though, is not just diagnosing the problem for people and telling them the truth about how we are falling behind. It is also opening their minds to the power of new technologies to solve old problems. There is more to political leadership than a competition for who can offer the most lavish safety nets. Yes, we must address people's fears, but we must also nurse their imaginations. Politicians can make us more fearful and thereby be disablers, or they can inspire us and thereby be enablers.

To be sure, it is not easy to get people passionate about the flat world.

It takes some imagination. President Kennedy understood that the competition with the Soviet Union was not a space race but a science race, which was really an education race. Yet the way he chose to get Americans excited about sacrificing and buckling down to do what it took to win the Cold War—which required a large-scale push in science and engineering—was by laying out the vision of putting a man on the moon, not a missile into Moscow. If President Bush is looking for a similar legacy project, there is one just crying out—a national science initiative that would be our generation's moon shot: a crash program for alternative energy and conservation to make America energy-independent in ten years. If President Bush made energy independence his moon shot, in one fell swoop he would dry up revenue for terrorism, force Iran, Russia, Venezuela, and Saudi Arabia onto the path of reform—which they will never do with $60-a-barrel oil—strengthen the dollar, and improve his own standing in Europe by doing something huge to reduce global warming. He would also create a real magnet to inspire young people to contribute to both the war on terrorism and America's future by again becoming scientists, engineers, and mathematicians. "This is not just a win-win," said Michael Mandelbaum. "This is a win-win-win-win-win."

I have consistently been struck that my newspaper columns that have gotten the most positive feedback, especially from young people, have been those that urged the president to call the nation to this task. Summoning all our strengths and skills to produce a twenty-first-century renewable energy source is George W. Bush's opportunity to be both Nixon going to China and JFK going to the moon in one move. Mr. Bush tautly acknowledged this with his 2006 State of the Union address, but he did not go nearly far enough.

Muscles

Since lifetime employment is a form of fat that a flat world simply cannot sustain any longer, compassionate flatism seeks to focus its energy on how government and business can enhance every worker's lifetime employability. Lifetime employability requires replacing that fat with muscle. The social contract that progressives should try to enforce between government and workers, and companies and workers, is one in which government and companies say, "We cannot guarantee you any lifetime employment. But we can guarantee you that we will concentrate on giving you the tools to make yourself more lifetime employable—more able to acquire the knowledge or the experience needed to be a good adapter, synthesizer, collaborator etc." In the flat world, the individual worker is going to become more and more responsible for managing his or her own career, risks, and economic security, and the role of government and business is to help workers build all the muscles they need to do just that.

The "muscles" workers need most are portable benefits and opportunities for lifelong learning. Why those two? Because they are the most important assets in making a worker mobile and adaptable. As Harvard University economist Robert Lawrence notes, the greatest single asset that the American economy has always had is the flexibility and mobility of its labor force and labor laws.

Given that reality, argues Lawrence, it becomes increasingly important for society, to the extent possible, to make benefits and education—the two key ingredients of employability—as flexible as possible. You don't want people to feel that they have to stay with a company forever simply to keep their pension and health benefits. The more the workforce feels mobile—in terms of health care, pension benefits, and lifelong learning possibilities—the more it will be willing and able to jump into the new industries and new job niches spawned by the flat world and to move from dying companies to thriving companies.

Creating legal and institutional frameworks for universal portability of pensions and health care—in addition to Social Security, Medicare, and Medicaid—will help people build up such muscles. Today roughly 50 percent of Americans don't have a job-based pension plan, other than Social Security. Those who are fortunate enough to have one cannot easily take it with them from job to job. What is needed is one simple universal portable pension scheme, along the lines proposed by the Progressive Policy Institute, that would get rid of the confusing welter of

sixteen different tax-deferred options now offered by the government and consolidate them all into a single vehicle. This universal plan, which you would open with your first job, would encourage workers to establish 401(k) tax-deferred savings programs. Each worker and his or her employer could make contributions of cash, bonuses, profit sharing, or stock, depending on what sorts of benefits the specific employer offered. These assets would be allowed to build up tax-free in whatever savings or investment portfolio options the worker chose. But if and when it came time to change jobs, the worker could take the whole portfolio with him or her and not have to either cash it out or leave it under the umbrella of the previous employer. Rollover provisions do exist today, but they are complicated and many workers don't take advantage of them because of that.

The universal pension format would make rollover simple, easy, and expected, so pension lockup per se would never keep someone from moving from one job to another. Each employer could still offer his or her own specific 401(k) benefit plan, as an incentive to attract employees. But once a worker moved to another job, the investments in that particular 401(k) would just automatically dump into his or her universal pension account. With each new job, a new 401(k) could be started, and with each move, the benefits deposited in that same universal pension account.

In addition to this simple, portable, and universal pension program, Will Marshall, president of the Progressive Policy Institute, proposes legislation that would make it much easier and more likely for workers to obtain stock options in the companies for which they work. Such legislation would give tax incentives to companies to give more workers more options earlier and penalize companies that do not. Part of making workers more mobile is creating more ways to make more workers owners of financial assets, not just their own labor. "We want a public that sees itself as stakeholders, sharing in the capital-creating side of the flat world, not just competing in global labor markets," argued Marshall. "We all have to be owners as well as wage earners. That is where public policy has to be focused—to make sure that people have wealth-producing assets as they enter the twenty-first century, the way homeownership accomplished that in the twentieth century."

Why? Because there is an increasing body of literature that says people who are stakeholders, people who have a slice of the pie, "are more deeply invested in our system of democratic capitalism and the policies that keep it dynamic," said Marshall. It is another way, besides homeownership, to underpin the legitimacy of democratic capitalism. It is also another way to energize it, because workers who are also owners are more productive on the job. Moreover, in a flat world where every worker is going to face stiffer competition, the more opportunities everyone has to build wealth through the power of markets and compounding interest, the more he or she will be able to be self-reliant. We need to give workers every stabilizer we can and make it as easy for them to get stock options as it is for the plutocrats. Instead of just being focused on protecting those with existing capital, as conservatives so often seem to be, let's focus instead on widening the circle of capital owners.

On the health-care side, which I won't delve into in great detail, since that would be a book unto itself, it is essential that we develop a scheme for portable health insurance that reduces some of the burden on employers for providing and managing coverage.Virtually every entrepreneur I talked to for this book cited soaring and uncontrolled health-care costs in America as a reason to move factories abroad to countries where benefits were more limited, or nonexistent, or where there was national health insurance. Again, I favor the type of portable health-care program proposed by PPI. The idea is to set up state-by-state collective purchasing pools, the way Congress and federal employees now cover themselves. These pools would set the rules and create the marketplace in which insurance companies could offer a menu of options. Each employer would then be responsible for offering this menu of options to each new employee. Workers could choose high, medium, or low coverage. Everyone, though, would have to be covered. Depending on the employer, it would cover part or all of the premiums and the employee the rest. But employers would not be responsible for negotiating plans with insurance companies, where they have little individual clout.

The state or federal pools would do that. This way employees would be totally mobile and could take their health-care coverage wherever they went. This type of plan has worked like a charm for members of Congress, so why not offer it to the wider public? Needy and low-income workers who could not afford to join a plan would get some government subsidy to do so. But the main idea is to establish a government-supervised, -regulated, and -subsidized private insurance market in which government sets the broad rules so that there is no cherry-picking of healthy workers or arbitrary denial of treatment. The health care itself is administered privately, and the job of employers is to facilitate their workers' entry into one of these state pools and, ideally, help them pay for some or all of the premiums, but not be responsible for the health care themselves. In the transition, though, employers could continue to offer health-care plans as an incentive, and workers would have the option of going with either the plan offered by their employers or the menu of options available through the state purchasing pools. (For details, go to ppionline.org.)

One can quibble about the details of any of these proposals, but I think the basic inspiration behind them is exactly right: In a flattening world, where worker security can no longer be guaranteed by Fortune 500 corporations with top-down pension and health plans, we need more collaborative solutions—among government, labor, and business—that will promote self-reliant workers but not just leave them to fend for themselves.

When it comes to building muscles of lifetime employability, government has another critical role to play: upgrading the educational level of the entire American workforce. In Chapter 7 I discussed the right kind of education for the jobs of the new middle. But for people to be able to learn how to learn, to nurture their right brains, to be adaptable, and to become synthesizers, they have to start by learning sound fundamentals. The right education can only be built on top of a sound education in the fundamentals—reading comprehension, writing, arithmetic, and basic science. Without more Americans with this solid grounding, we can't possibly build a new middle of the size we need to keep our standard of living rising.

We've been here before. Each century, as we push out the frontiers of human knowledge, work at every level becomes more complex, requiring more pattern recognition and problem solving. Somehow we got through this transition from an agriculture-based society 150 years ago to an industrial-based one—and still ended up with a higher standard of living for the vast majority of Americans. How did we do it? We began by making high school mandatory.

"We said everyone is going to have to have a secondary education," said Stanford University economist Paul Romer. "That was what the high school movement in the early part of the twentieth century was all about." As economic historians have demonstrated in a variety of research (see particularly the work of Harvard economists Claudia Goldin and Larry Katz), both technology and trade are making the pie bigger, but they are also shifting the shares of that pie away from low-skilled labor to high-skilled labor. As American society produced more higher-skilled people by making high school mandatory, it empowered more people to get a bigger slice of the bigger, more complex economic pie. As that century progressed, we added, on top of the high school movement, the GI Bill and the modern university system.

"These were big ideas," noted Romer, "and what is missing at the moment is a political imagination of how do we do something just as big and just as important for the transition into the twenty-first century as we did for the nineteenth and twentieth." The obvious challenge, Romer added, is to make tertiary education, if not compulsory, then government-subsidized for at least two years, whether it is at a state university, a community college, or a technical school. Tertiary education is more critical the flatter the world gets, because technology will be churning old jobs, and spawning new, more complex ones, much faster than during the transition from the agricultural economy to the industrial one.

Educating more people at the tertiary level has two effects. First, it produces more people with the skills to claim higher-value-added work in the new niches that require more pattern recognition, synthesizing, and complex problem solving. Second, it shrinks the pool of people looking for lower-skilled work, from road maintenance to home repair to Starbucks baristas. By shrinking the pool of lower-skilled workers, we help to stabilize their wages (provided we also control low-skilled immigration), because there are fewer people available to do those jobs. It is

not an accident that plumbers can charge $75 an hour in major urban areas or that quality housekeepers or cooks are hard to find. That's good. We want them to be more in demand and to make a decent wage.

America's ability from the mid-nineteenth century on into the mid-twentieth century to train people, limit immigration, and make low-skilled work scarce enough to win decent wages was the key to creating a middle class without too disparate an income gap. "Indeed," noted Romer, "from the end of the nineteenth century to the middle of the twentieth, we had a narrowing of the income gap. Now we have seen an increase of that gap over the last twenty or thirty years. That is telling us that you have to run faster in order to stay in the same place." With each advance in technology and increase in the complexity of services, you need an even higher level of skills to do the new jobs. Moving from being a farmhand to a phone operator who spoke proper English and could be polite was one thing. But moving from being a phone operator after the job got outsourced to India to being able to install or repair phone-mail systems—or write their software—requires a whole new leap upward.

While expanding research universities on the high end of the spectrum is important, so is expanding the availability of technical schools and community colleges. Everyone should have a chance to be educated beyond high school. Otherwise upper-income kids will get those skills and their slice, and the lower-income kids will never get a chance. We have to increase the government subsidies that make it possible for more and more kids to attend community colleges and more and more low-skilled workers to get retrained.

JFK wanted to put a man on the moon. My vision is to put every American man or woman on a campus.

Employers have a critical contribution to make to their workers' lifetime employability, and it starts by helping them become more adaptable through lifetime learning. Take, for instance, CapitalOne, the global credit card company, which began outsourcing elements of its backroom operations to Wipro and Infosys in India over the past few years. Competing in the global financial services market, the company felt it had to take advantage of all the cost-saving opportunities that its competitors were using. CapitalOne began, though, by trying to educate its employees through workshops about the company's competitive predicament. It made clear that there is no safe haven where lifetime employment is possible anymore—inside CapitalOne or outside. Then it developed a program for the cross training of computer programmers, those most affected by outsourcing. The company would take a programmer who specialized in mainframes and teach him or her to be a distributed systems programmer as well. CapitalOne did similar cross training on its business side, in everything from auto loans to risk management. As a result, the workers who were eventually let go in an outsourcing move were much better synthesizers, much more versatile, and therefore in a much better position to get new jobs, because they were cross trained. And those who were cross trained but retained by CapitalOne were more versatile and therefore more valuable to CapitalOne, because they could do multiple tasks.

That is why our whole society benefits when government provides subsidies or tax incentives to companies to offer as wide an array as possible of in-house learning opportunities. The menu of Internet-based worker-training programs today is enormous—from online degree programs to in-house guided training for different specializations. (And every week brings a technological breakthrough that makes this easier and richer. For instance, we have not even begun to tap the potential of putting the lectures of great teachers on video. Why suffer through bad teachers when a great teacher is just a flat screen away?) Not only is the menu enormous and growing, but the cost to the company for offering these educational options is very low. The more lifetime learning opportunities that companies provide, the more they are both widening the skill base of their own workforce and fulfilling a moral obligation to workers whose jobs are outsourced to see to it that they leave more employable than they came. If there is a new social contract implicit between employers and employees today, it should be this: *You give me your labor, and I will guarantee that as long as you work here, I will give you every opportunity—through either career advancement or training—to become more employable, more versatile.*

George Miller, a wise longtime Democratic congressman from the East Bay district in San Francisco, who is deeply involved with public schools there, once remarked to me, "Education is a process, not a place." Education can and must go on everywhere all the time—in

schools, offices, at home, online, in the classroom, over your iPod—with conventional teachers, self-teaching methods, online games, whatever works. You cannot let up, because somewhere out there there's a competitor who isn't letting up.

While we need to redouble our efforts to build the muscles of each individual American, we have to continue to import muscles from abroad as well to make up for what we cannot educate here. Most of the Indian, Chinese, Russian, Japanese, Korean, Iranian, Arab, and Israeli engineers, physicists, and scientists who come to work or study in the United States make great citizens. They are family-oriented, educated, and hardworking, and most would jump at the chance to become an American. They are exactly the type of people this country needs, and we cannot let the FBI, CIA, and Homeland Security, in their zeal to keep out the next Mohammed Atta, also keep out the next Sergey Brin, one of the cofounders of Google, who was born in Russia. As a computer architect friend of mine says, "If a foreign-born person is one day going to take my job, I'd prefer they be American citizens helping pay for my retirement benefits."

I would favor an immigration policy that gives a five-year work visa to any foreign student who completes a Ph.D. at an accredited American university in any subject. I don't care if it is Greek mythology or mathematics. If we can cream off the first-round intellectual draft choices from around the world, it will always end up a net plus for America. If the flat world is about connecting all the knowledge pools together, we want our knowledge pool to be the biggest. Said Bill Brody, the president of Johns Hopkins, "We are in a global talent search, so anything we can do in America to get those top draft choices we should do, because one of them is going to be Babe Ruth, and why should we let him or her go somewhere else?"

Good Fat
Cushions Worth Keeping

While many of the old corporate and government safety nets will vanish under global competition in the flat world, some fat still needs to be maintained, and even added. As everyone who worries about his or her health knows, there is "good fat" and "bad fat"—but everybody needs some fat. That is also true of every country in the flat world. Social Security is good fat. We need to keep it. A welfare system that discourages people from working is bad fat. The sort of good fat that actually needs to be added for a flat world is wage insurance.

According to a study by Lori Kletzer, an economist at the University of California, Santa Cruz, in the 1980s and '90s, two-thirds of workers who lost jobs in manufacturing industries hit by overseas competition earned less on their next job. A quarter of workers who lost their jobs and were reemployed saw their income fall 30 percent or more. Losing a job for any reason is a trauma—for the worker and his or her family—but particularly for older workers who are less able to adapt to new production techniques or lack the education to move up into more skilled service jobs.

This idea of wage insurance was first proposed in 1986 by Harvard's Robert Lawrence and Robert E. Litan of the Brookings Institution, in a book called *Saving Free Trade.* The idea languished for a while until it started to catch fire again with an updated analysis by Kletzer and Litan in 2001. It got further political clout from the bipartisan U.S. Trade Deficit Commission in 2001. This commission couldn't agree on anything—including the causes of or what to do about the trade deficit—other than the wisdom of wage insurance.

"Trade creates winners and losers, and what we were thinking about were mechanisms by which the winners could compensate the losers, and particularly losers who were enjoying high wages in a particular job and suddenly found their new employment at much lower wages," said Lawrence. The way to think about this, he explained, is that every worker has "general skills and specific skills" for which he or she is paid, and when you switch jobs you quickly discover which is which. So you might

have a college and CPA degree, or you might have a high school degree and the ability to operate a lathe. Both skills were reflected in your wages. But suppose one day your lathe job gets moved to China or your basic accounting work is outsourced to India and you have to go out and find a new job. Your new employer will not likely compensate you much for your specific skills, because your knowledge as a machine tool operator or a general accountant is probably of less use to him or her. You will be paid largely for your general skills, your high school education or college degree. Wage insurance would compensate you for your old specific skills, for a set period of time, while you take a new job and learn new specific skills.

The standard state-run unemployment insurance program eases some of this pain for workers, but it does not address their bigger concerns of declining wages in a new job and the inability to pay for health insurance while they are unemployed and searching. To qualify for wage insurance, workers seeking compensation for job loss would have to meet three criteria. First, they would have to have lost their job through some form of displacement—offshoring, outsourcing, downsizing, or factory closure. Second, they would have to have held the job for at least two years. And third, the wage insurance would not be paid until the workers found new jobs, which would provide a strong incentive to look for work quickly and increase the chances that they would get on-the-job retraining. On-the-job training is always the best way to learn new skills—instead of having to sign up for some general government training program, with no promise of a job at the other end, and go through that while remaining unemployed.

Workers who met those three conditions would then receive payments for two years, covering half the drop in their income from their previous job (capped at $10,000 a year). Kletzer and Litan also proposed that the government pay half the health insurance premiums for all "displaced" workers for up to six months. Wage insurance seems to me a much better idea than relying only on the traditional unemployment insurance offered by states, which usually covers only about 50 percent of most workers' previous wages, is limited to six months, and does not help workers who suffer a loss of earnings after they take a new job.

Moreover, as Kletzer and Litan noted, although all laid-off workers now have the right to purchase unsubsidized health insurance from their former employer if health coverage was offered when they were employed, many jobless workers do not have the money to take advantage of this guarantee. Also, while unemployed workers can earn an additional fifty-two weeks of unemployment insurance if they enroll in an approved retraining program, workers have no guarantee that when they finish such a program they will have a job.

For all these reasons, the Kletzer-Litan proposal makes a lot of sense to me as the right benefit for cushioning workers in a flat world. Moreover, such a program would be eminently affordable. Litan estimated that at an unemployment rate of 5 percent, the wage insurance and healthcare subsidy today would cost around $8 billion a year, which is peanuts compared to the positive impact it could have on workers. This program would not replace classic state-run unemployment insurance for workers who opt for that, but if it worked as projected, it could actually reduce the cost of such programs by moving people back to work quicker.

Some might ask, Why be compassionate at all? Why keep any fat, friction, or barriers? Let me put it as bluntly as I can: If you are not a compassionate flatist—if you are just a let 'er rip free-market flatist—you are not only cruel, you are a fool. You are courting a political backlash by those who can and will get churned up by this flattening process, and that backlash could become ferocious if we hit any kind of prolonged recession.

The transition to a flat world is going to stress many people. As Joshua S. Levine, E*Trade's chief technology officer, put it to me, "You know how sometimes you go through a harrowing experience and you need a respite, but the respite never seems to come. Look at the airline workers. They go through this [terrible] event like 9/11, and management and the airline unions all negotiate for four months and management says, 'If the unions don't cut $2 billion in salary and benefits they will have to shut the airline down.' And after these wrenching negotiations the unions agree. I just have to laugh, because you know that in a few months management is going to come right back . . . There is no end. No one has to ask me to cut my budget each year. We all just know that each year we will be expected to do more with less. If you are a revenue producer, you

are expected to come up with more revenue every year, and if you are an expense saver, you are expected to come up with more savings every year. You never get a break from it."

If societies are unable to manage the strains that are produced by this flattening, there will be a backlash, and political forces will attempt to reinsert some of the frictions and protectionist barriers that the flattening forces have eliminated, but they will do it in a crude way that will, in the name of protecting the weak, end up lowering everyone's standard of living. Former Mexican president Ernesto Zedillo is very sensitive to this problem, having had to manage Mexico's transition into NAFTA, with all of the strains that put on Mexican society. Speaking of the flattening process, he said to me, "It would be very hard to stop, but it can be stopped for a time. Maybe you can't stop it totally, but you can slow it down. And it makes a difference whether you get there in twenty-five years or fifty years. In between, two or three generations—who could have benefited a lot from more trade and globalization—will end up with crumbs."

Always remember, said Zedillo, that behind all this technology is a political infrastructure that enables it to play out. "There have been a series of concrete political decisions, taken over the last fifty years, that put the world where it is right now," he said. "Therefore, there are political decisions that could screw up the whole process too."

As the saying goes: If you want to live like a Republican, vote like a Democrat—take good care of the losers and left-behinds. The only way to be a flatist is to be a compassionate flatist.

Social Activism

One new area that is going to need sorting out is the relationship between global corporations and their own moral consciences. Some may laugh at the notion that a global corporation even has a moral conscience, or should ever be expected to develop one. But some do and others are going to have to develop one, for one simple reason: In the flat world, with lengthy global supply chains, the balance of power between global companies and the individual communities in which they operate is tilting more and more in favor of the companies, many of them American-based. As such, these companies are going to command more power, not only to create value but also to transmit values, than any transnational institutions on the planet. Social and environmental activists and progressive companies can now collaborate in ways that can make both the companies more profitable and the flat earth more livable. Compassionate flatism very much seeks to promote this type of collaboration.

Let me illustrate this notion with a couple of examples. If you think about the forces that are gobbling up biodiversity around the planet, none are more powerful than farmers. It is not that they are intending to be harmful, it is just in the nature of what they do. So how and where people farm and fish really matter to whether we preserve natural habitats and species. Conservation International, one of the biggest environmental NGOs in the world, has as its main mission preserving biodiversity. It is also a big believer in trying, when possible, to collaborate with big business, because when you bring a major global player around, it can have a huge impact on the environment. In 2002, McDonald's and Conservation International forged a partnership to use the McDonald's global supply chain—a behemoth that sucks beef, fish, chicken, pork, bread, lettuce, pickles, tomatoes, and potatoes from all four corners of the flat world—to produce not just value but also different values about the environment. "We and McDonald's looked at a set of environmental issues and said, 'Here are the things the food suppliers could do to reduce the environmental impact at little or no cost,'" explained Glenn Prickett, senior vice president of Conservation International.

McDonald's then met with its key suppliers and worked out, with them and with CI, a set of guidelines for what McDonald's calls "socially responsible food supply." "For conservationists the challenge is how do you get your arms around hundreds of millions of decisions and decision makers involved in agriculture and fisheries, who are not coordinated in any way except by the market," said Prickett. "So what we look for are partners who can put their purchasing power behind a set of environmentally friendly practices in a way that is good for them, works for the producers, and is good for biodiversity. In that way, you can start to cap-

ture so many more decision makers . . . There is no global government authority to protect biodiversity. You have to collaborate with the players who can make a difference, and one of them is McDonald's."

Conservation International is already seeing improvements in conservation of water, energy, and waste, as well as steps to encourage better management of fisheries, among McDonald's suppliers. But it is still early, and one will have to assess over a period of years, with comprehensive data collection, whether this is really having a positive impact on the environment. This form of collaboration cannot and should never be a substitute for government rules and oversight. But if it works, it can be a vehicle for actually getting government rules implemented. Environmentalists who prefer government regulation to these more collaborative efforts often ignore the fact that strong rules imposed against the will of farmers end up being weakly enforced—or not enforced at all.

What is in this for McDonald's? It is a huge opportunity to improve its global brand by acting as a good global citizen. Yes, this is, at root, a business opportunity for McDonald's. Sometimes the best way to change the world is by getting the big players to do the right things for the wrong reasons, because waiting for them to do the right things for the right reasons can mean waiting forever. Conservation International has struck similar supply-chain collaborations with Starbucks, setting rules for its supply chain of coffee farmers, and Office Depot, with its supply chain of paper-product providers.

What these collaborations do is start to "break down the walls between different interest groups," said Prickett. Normally you would have the environmentalists on one side and the farmers on the other and each side trying to get the government to write the regulations in the way that would serve it. Government would end up writing the rules largely to benefit business. "Now, instead, we have a private entity saying, 'We want to use our global supply chain to do some good,' but we understand that to be effective it has to be a collaboration with the farmers and the environmentalists if it is going to have any impact," Prickett said.

In this same vein, as a compassionate flatist, I would like to see a label on every electronics good state whether the supply chain that produced it is in compliance with the standards set down by the new HP-Dell-IBM alliance. In October 2004, these three giants joined forces in a collaborative effort with key members of their computer and printer supply chains to promote a unified code of socially responsible manufacturing practices across the world. The new Electronics Industry Code of Conduct includes bans on bribes, child labor, embezzlement and extortion, and violations of intellectual property; rules governing usage of wastewater, hazardous materials, pollutants; and regulations on the reporting of occupational injuries. Several major electronics manufacturers who serve the IBM, Dell, and HP supply chains collaborated on writing the code, including Celestica, Flextronics, Jabil, Sanmina-SCI, and Solectron.

All HP suppliers, for instance, will be required to follow the code, though there is flexibility in the timing of how they reach compliance. "We are completely prepared and have terminated relationships with suppliers we find to be repeatedly nonresponsive," said HP spokeswoman Monica Sarkar. As of October 2004, HP had assessed more than 150 of its 350 suppliers, including factories in China, Mexico, Southeast Asia, and Eastern Europe. It has set up a steering committee with IBM and Dell in order to figure out exactly how they collectively can review compliance and punish consistent violators. Compliance is everything, and so, again, it remains to be seen just how vigilant the corporations will be with their suppliers. Nevertheless, this use of supply chains to create values—not just value—could be a wave of the future.

"As we have begun to look to other [offshore] suppliers to do most of our manufacturing, it has become clear to us that we have to assume some responsibility for how they do that work," explained Debra Dunn, HP's senior vice president of corporate affairs and global citizenship. First and foremost, that is what many of HP's customers want. "Customers care," said Dunn, "and European customers lead the way in caring. And human rights groups and NGOs, who are gaining increasing global influence as trust in corporations declines, are basically saying, 'You guys have the power here. You are global companies, you can set expectations that will influence environmental practices and human rights practices in emerging markets.'"

Those voices are right, and what is more, they can use the Internet to great effect, if they want, to embarrass global corporations into compliance.

"When you have the procurement dollars that HP and McDonald's have," said Dunn, "people really want to do business with you, so you have leverage and are in a position to set standards and [therefore] you have a responsibility to set standards." The role of global corporations in setting standards in emerging markets is doubly important, because oftentimes local governments actually want to improve their environmental standards. They know it is important in the long run, but the pressure to create jobs and live within budget constraints is overwhelming and therefore the pressure to look the other way is overwhelming. Countries like China, noted Dunn, often actually want an outside force, like a global business coalition, to exert pressure to drive new values and standards at home that they are too weak to impose on themselves and their own bureaucrats. In *The Lexus and the Olive Tree* I called this form of value creation "globalution," or revolution from beyond.

Said Dunn: "We used to say that as long as we complied with the local law, that was all we could be expected to do. But now the imbalance of power is so huge it is not practical to say that Wal-Mart or HP can do whatever they want as long as a state government or country does not stop them. The leverage HP would leave on the table would be immoral given its superior power . . . We have the power to transmit global governance to our universe of suppliers and employees and consumers, which is a pretty broad universe."

Dunn noted that in a country like China there is an intense competition by local companies to become part of the HP or Dell or Wal-Mart supply chain. Even though it is high pressure, it means a steady volume of considerable business—the kind that can make or break a company. As a result, HP has huge leverage over its Chinese suppliers, and they are actually very open to having their factory standards lifted, because they know that if they get up to the standards of HP they can leverage that to get business from Dell or Sony.

Advocates of compassionate flatism need to educate consumers to the fact that their buying decisions and buying power are political. Every time you as a consumer make a decision, you are supporting a whole set of values. You are voting about the barriers and friction you want to preserve or eliminate. Progressives need to make this information more easily available to consumers, so more of them can vote the right way and support the right kind of global corporate behavior.

Parenting

No discussion of compassionate flatism would be complete without also discussing the need for improved parenting. Helping individuals adapt to a flat world is not only the job of governments and companies. It is also the job of parents. They too need to know in what world their kids are growing up and what it will take for them to thrive. In short, we need a new generation of parents ready to administer tough love: There comes a time when you've got to put away the Game Boys, turn off the television, shut off the iPod, and get your kids down to work.

The sense of entitlement, the sense that because we once dominated global commerce and geopolitics—and Olympic basketball—we always will, the sense that delayed gratification is a punishment worse than a spanking, the sense that our kids have to be swaddled in cotton wool so that nothing bad or disappointing or stressful ever happens to them at school is, quite simply, a growing cancer on American society. And if we don't start to reverse it, our kids are going to be in for a huge and socially disruptive shock from the flat world. While a different approach by politicians is necessary, it is not sufficient.

Shortly after this book first came out my wife (a schoolteacher) pointed out to me a letter to the editor in *The New York Times* (September 1, 2005) in response to a column on faltering American education by my colleague Bob Herbert. The letter summed up my feelings exactly: "To the Editor: Regarding the state of education in the United States, Bob Herbert writes, 'I respectfully suggest that we may be looking at a crisis here' . . . As a highly qualified teacher of English at the high school level, I agree. But this crisis we see in our schools has its roots in American homes increasingly devoid of books and printed material, where children turn exclusively to television, computers and electronic games for entertainment—and see the adults around them doing the

same. Instant-gratification technology has, for many students, replaced the task—and the thrill—of reading. One cannot develop solid writing skills without first being a decent reader; underdevelopment of these skills translates to low scores in standardized testing across racial and economic lines, and in all subject areas. Education begins in a home where reading is intrinsically valuable and necessary; where recognition of the hard work associated with education and doing well in school are top priorities; and where parents join schools in having high expectations for their children's success. Without this initial foundation and continued support at home, a teacher's hands are tied at school. Jo Ann Price, Freehold, N.J."

David Baltimore, the Nobel Prize–winning president of Caltech, knows what it takes to get your child ready to compete against the cream of the global crop. He told me that he is struck by the fact that almost all the students who make it to Caltech, one of the best scientific universities in the world, come from public schools, not from private schools that sometimes nurture a sense that just because you are there, you are special and entitled. "I look at the kids who come to Caltech, and they grew up in families that encouraged them to work hard and to put off a little bit of gratification for the future and to understand that they need to hone their skills to play an important role in the world," Baltimore said. "I give parents enormous credit for this, because these kids are all coming from public schools that people are calling failures. Public education is producing these remarkable students—so it *can* be done. Their parents have nurtured them to make sure that they realize their potential. I think we need a revolution in this country when it comes to parenting around education."

Foreign-born parents, particularly from Asia and Eastern Europe, often seem to do this better. "About one-third of our students have an Asian background or are recent immigrants," said Baltimore. A significant majority of the students coming to Caltech in the engineering disciplines are foreign-born, and a large fraction of its current faculty is foreign-born. "In biology, at the postdoc level, the dominance of Chinese students is overwhelming," he added. No wonder that at the big scientific conferences today, a majority of the research papers dealing with cutting-edge bioscience have at least one Chinese name on them. By the way, nearly

90 percent of the kids who go to MIT, a school just like Caltech, also come from two-parent homes, where both parents can help guide a child down the straight and narrow.

In July 2004, comedian Bill Cosby used an appearance at Jesse Jackson's Rainbow/PUSH Coalition & Citizenship Education Fund's annual conference to upbraid African Americans for not teaching their children proper grammar and for black kids not striving to learn more themselves. Cosby had already declared, "Everybody knows it's important to speak English except these knuckleheads. You can't be a doctor with that kind of crap coming out of your mouth." Referring to African Americans who squandered their chances for a better life, Cosby told the Rainbow Coalition, "You've got to stop beating up your women because you can't find a job, because you didn't want to get an education and now you're [earning] minimum wage. You should have thought more of yourself when you were in high school, when you had an opportunity." When Cosby's remarks attracted a lot of criticism, Reverend Jackson defended him, arguing, "Bill is saying, let's fight the right fight. Let's level the playing field. Drunk people can't do that. Illiterate people can't do that."

That is right. Americans are the ones who increasingly need to level the playing field—not by pulling others down, not by feeling sorry for ourselves, but by lifting ourselves up. But when it comes to how to do that, Cosby was saying something that is important for black and white Americans, rich and poor. Education, whether it comes from parents or schools, has to be about more than just cognitive skills. It also has to include character building. The fact is, parents and schools and cultures can and do shape people. The most important influence in my life, outside of my family, was my high school journalism teacher, Hattie M. Steinberg. She pounded the fundamentals of journalism into her students—not simply how to write a lead or accurately transcribe a quote but, more important, how to comport yourself in a professional way. She was nearing sixty at the time I had her as my teacher and high school newspaper adviser in the late 1960s. She was the polar opposite of "cool," but we hung around her classroom like it was the malt shop and she was Wolfman Jack. None of us could have articulated it then, but it was because we enjoyed being harangued by her, disciplined by her, and taught by her. She was a

woman of clarity and principles in an age of uncertainty. I sit up straight just thinking about her! Our children will increasingly be competing head-to-head with Chinese, Indian, and Asian kids, whose parents have a lot more of Hattie's character-building approach than their own American parents. I am not suggesting that we militarize education, but I am suggesting that we do more to push our young people to go beyond their comfort zones, to do things right, and to be ready to suffer some short-run pain for longer gain.

Unfortunately, it has been too long since America had a leader ready and willing to call on our nation to do something hard—to give something up, not just to get something more, and to sacrifice for a great national cause in the future, rather than live for today. But maybe we also have the leaders we deserve—a perfect reflection of who we are and how we raise our own children. Paul A. Samuelson, the Nobel Prize–winning economist from MIT whose textbooks have shaped economics students around the world for nearly five decades, gave a rare interview with the German weekly *Der Spiegel*, for a special issue titled *Globalization: The New World* (December 2005). Asked what he saw as the future of the American economy, Samuelson answered, "We may still be the lead cyclist breaking the wind for the riders behind us, but the others are closing in. America's status as a leading nation is growing increasingly tenuous because we have become such a low-savings society. We are a society of me, me, me, and now—not thinking about others and tomorrow. I suppose the problem is the electorate, not its leaders . . . In the past, bright kids who later became mathematicians were doing challenging puzzles. Today they watch TV. There are too many distractions, which is another reason why we have this attitude of me, me, me, and now."

If this is a test, and I think it is, our leaders and our parents have not done as good a job as they could to prepare our young people for the world ahead. "We are like a glass beaker that is filled three-quarters of the way to the top, and the liquid is our wealth," said Steve Jobs, the founder of Apple Computer and one of America's greatest innovators. "There is this much bigger beaker next to it, but it is filled to a much lower level. What we are doing today is we're connecting a hose between these two beakers, which have never been connected before." As a result, he said, our standard of living is almost certain to go down unless we can continue to be "incredibly innovative."

But, added Jobs, "I am afraid we are getting close to it being too late. Because you can't change the school system in the short term, we might be just beginning to pay the price for the neglect of the last twenty years." Jobs noted that his company recently decided to build a major plant in China, and he was amazed at how quickly the Chinese government made the decision to locate the factory, provide capital to subsidize its building, and help assemble a workforce. "Boom, it was done just like that," he said. "Fifteen years ago, ten years ago, that would have happened in Texas or somewhere else [in America]. Now it is happening in China. So the liquid is already flowing from one beaker to the other. And it will flow even more when they start designing the products. I am an optimist [about America's future], but if we are sitting around watching Rome burn, it's hard to be an optimist."

Steve Jobs's rallying call is a good place to end this chapter, a chapter that began with President Kennedy rallying the country to rise to the challenge of putting a man on the moon. Because, in some way, they were both engaged in the same endeavor—calling on Americans to do what they do best, which is invent the future.

On October 24, 2005, *Time* magazine ran a cover story about Apple's latest invention. The cover showed Jobs holding up the newest Apple iPod, the one that plays videos as well as music. And the headline said, "The Man Who Always Seems to Know . . . WHAT'S NEXT." That is the only way America is going to thrive in a flat world—if we keep inventing the next new thing. My friend Jerry Rao, the Indian entrepreneur who founded MphasiS, made an offhand comment to me one day that still rings in my ear. For India and China the future is very clear, he said. They know exactly what they are going to do in the future. "We are going to do in the future what Americans are doing today," he said. "Your job is to invent the future." That is so right—America's job is not to fight with India and China over the old middle but to invent the new middle, and more. "That is always hard," added Jerry, "because you don't know what the future looks like," and because it always takes a leap of faith to believe that you will always be able to invent that next new thing.

But that is our mission—and our best hope. That is what President Kennedy understood. It is what Steve Jobs, Marc Andreessen, Shirley Ann Jackson, Michael Dell, Craig Barrett, and Bill Gates understand. The *only* way we are going to keep our standard of living rising is to build a society that produces people who can keep inventing the future. But as knowledge hurtles forward, inventing the future becomes a harder and harder task—one that takes more of the right education, the right infrastructure, the right ambition, the right leadership, the right parenting. We need to get our whole country focused around meeting this challenge.

The future won't wait for us, and if we don't invent it, someone else will. Because, as Jerry Rao will also tell you, India and China will be doing tomorrow what America does today, but, thanks to the flat-world platform, the day after tomorrow, India, China, and many others will also be inventing the future. As I have tried to stress, Globalization 3.0, which brought us to this flattening world, is not just Globalization 2.0 intensified. It is a whole different model. It is not just about the ability of developed countries to tap into more markets or access more cheap labor. It is a difference in degree so great—the degree of low-cost interconnectivity, the degree of individual empowerment, the degree of global networks for collaboration—that it is a *difference in kind*. It changes everything about who can compete and how they compete. An essay in the November 2005 *Mercer Management Journal*, "Are You Enjoying Globalization Yet?" summed up those differences well, noting that the flat world gives more people in more places the ability to pull together low-cost labor with high-power technology. We have never seen that combination before—and it alone is already a challenge to developed countries. But the Indias and Chinas are increasingly adding one more thing to low-cost labor and high-power technology: unfettered imagination—that is, high innovative and creative capacities. They will focus first on solving their own problems with cheap labor, high technology, and high creativity—re-imagining their own futures. Then they will focus on ours. We must have people, lots of people, who can do the same. So, for the last time, you have been warned. This is not a test.

Developing Countries and the Flat World