



Spotlight Interview on Edward Gordon

Labor market futurist predicts economic meltdown

Between now and 2020, shortages of skilled workers will drive salaries through the roof

Trend Letter Editor: Your latest book, *The 2010 Meltdown*, predicts that baby boomer retirements coupled with a shortage of younger, well-educated individuals will cause an economic meltdown. Can you explain why?

Gordon: The meltdown will come as a result of twin economic shocks, and you've described one of them. The other is technology, which is continuing to drive up the need worldwide for a skilled workforce. The baby boomers in the United States are the best educated generation. Unfortunately, not only is the next generation smaller, it also is less skilled in using these technologies properly. It's the thinking, creative jobs that need a skilled brain behind the technology to get the work done, whether in health care, law, industrial applications or business, that will get harder and harder to fill. So these two things coming together—advancing technology and a shortage of educated workers—will cause a severe economic downturn.

TL: Won't businesses be able to import the kind of workers you're talking about from other countries?

Gordon: That's what many people in business seem to think. They believe they will be able to import specialized workers that they can't find in the United States from places like China and India, which they believe have an endless supply. But the truth is that many colleges and

universities in those countries are substandard, so many degrees aren't worth the paper they're written on. That means there aren't enough qualified graduates to meet the needs of their own economies, let alone ours. So wages for skilled workers are rising. In China, salaries for engineers were 10% of those in the U.S. Now that figure has risen to 50% and soon will be at par. By

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2010, India will have its own shortage of IT technicians because its own industries are growing. Increasingly, there is economic opportunity in these countries to employ engineers and technicians, so many grad students here in the U.S. from India are going back home. In China, it's so pervasive, they call these workers “Sea Turtles.”

TL: You mentioned earlier that the generation that followed the baby boomers isn't as well educated, especially in terms of technology. Why is there a skills gap?

Gordon: I call it the “technology paradox.” On the one hand, Americans are fascinated by technology and use it extensively. Kids may know how to use a computer, but most don't want to get involved in high-tech design, manufacturing, maintenance or management because that requires higher levels of reading, math and sciences, as well as specialized technical knowledge. In our culture, these are not cool jobs, so schools aren't set up to offer those subjects at the higher levels. High school graduation rates, for example, are down. For the baby boomers, the rate was 83%. This generation it's 73%. In Chicago, where I live, it's 52%. If you don't graduate from high school, what are you fit to do? Not much. So when faced with a problem, a growing number of workers won't be able to innovate and come up with a creative solution.

TL: Won't the labor market adjust?

Gordon: Yes, but it will be a painful adjustment. Between now and 2020, the shortages I'm talking about will drive salaries way up. Nursing is a good example. By 2020, it's expected that there will be a shortage of 3 million nurses in the U.S. Why? Because nursing isn't considered a “cool” profession. Women haven't been going into nursing in large numbers; they're getting MBAs instead. The average age of nurses today is around 50.

These are highly educated women, but they're underpaid because the work isn't respected. Meanwhile, aging baby boomers are going to need more health services. You can imagine what that will do to the market. The lack of nurses—and other skilled health care workers, like radiology technicians, for example—will result in health care rationing. To obtain hospital services, they will have to pay a premium over and above regular health insurance. As a result, I predict that by 2015, the average nurse will make \$150,000 and work eight-hour days. That, in turn, will cause parents to demand more math and sciences in schools. But that will take time. And in the meantime, people who need health care will suffer because they can't afford it or because it won't exist. You will see hospitals closing or shutting wings because they just don't have the skilled staff. And it's the same in other sectors: The average age of auto and airplane mechanics continues to rise; if the computer in your car stops working, there may not be anybody available to fix it. And several surveys indicate that companies that can't hire key technical people will simply go out of business.

TL: Are there any homegrown solutions to the problems you're anticipating?

Gordon: Sure. Communities across the U.S. are experiencing a lot of this already, and some are coming up with innovative solutions. Take Santa Ana, California, it has a large population of Latinos, many of whom work in manufacturing jobs. But the manufacturers are leaving. So in cooperation with local businesses, unions and schools, Santa Ana put together an

intermediary agency called "Bridge to Careers." This nongovernmental agency [NGO] pools resources in the community to retrain older workers so they use technologies. It set up career education programs in schools so graduates could enter

"If you don't graduate from high school, what are you fit to do? Not much."

those exciting new technical career areas and published a major study to tell parents what the jobs were, how much they paid and the kind of education children would need to get them. It's important for parents to know this. We have to change the cultural mindset about what are the cool, high-paying, desirable jobs. It's not what's on TV.

TL: You identify shareholders' obsession with short-term profits as one of the problems inhibiting more high-tech education and training. Is it realistic to expect the business community to alter its "culture" to make the necessary changes? And is there a political will to make it happen?

Gordon: We are in the midst of seeing a sea change in business culture in the U.S., where the need for short-term profit is balanced with long-term viability. Investment fund managers are pressuring companies to invest long term in renewing the human capital in their companies, not to be nice or socially responsible, but simply to survive as a business. This is happening in communities all over the U.S. Local businesses see that the time has come to do something revolutionary and different. Many large businesses already know this and invest in career training. The NGO model I described earlier suits small businesses that can't afford career retraining on their own. Politicians have been reluctant to climb on board because most voters still don't understand the issues and what's at stake. The problem is that for a long time, we had a system where it was easy to retrain workers quickly. That's why I've been writing so much about this issue. If the skilled workforce shrinks, the economy will shrink, and that's the meltdown. What will happen depends on how each community organizes itself. I see myself as a messenger to speed up the process of this transition, and I'm optimistic that it will happen.

Edward E. Gordon is president of Imperial Consulting Corp. in Chicago and Palm Desert, Calif. (www.imperialcorp.com). He is a recognized international expert on the future of labor market development and many education reform issues. Gordon is the author or co-author of 15 books including The 2010 Meltdown, Skill Wars, Literacy in America, FutureWork, Closing the Literacy Gap in American Business, Tutor Quest and Opportunities in Training and Development Careers. He was a featured speaker at the World Future Society's 40th anniversary conference: Creating Global Strategies for Humanity's Future, which was held in Toronto, Canada, on July 28-30.

Worldwide Demographic Crossroad Nears

by **Hank Lindborg**

In the hopeful days following the dissolution of the former Soviet Union, a colleague of mine, who is an expert in community development and school design, was invited to tour a Moscow library dedicated to books about the future.

Obsessed by planning and utopian dreams, the Soviets had amassed a trove of visionary writing from around the world. As has happened to many of us whose childhoods were filled with promises of space-age technology, my friend was touched by the irony of contrast between ideal futures and social reality.

At a distance, the future always seemed bright. Now it's here and quite different from what we imagined.

2010 Crossroad

The rapidity of change, once merely a cliché, is now a painful reality, and our horizons are closer. Take, for example, *The 2010 Meltdown: Solving the Impending Jobs Crisis*,¹ the latest book by Edward E. Gordon, one of our most cogent experts on work and training.

We're only four years away from Gordon's future—the crossroad at which a dramatic demographic shift worldwide will put a new premium on talent. Across the globe, societies are aging, and large numbers of skilled persons are departing the workforce. This will present enormous consequences that will go beyond what we may have assumed were just more opportunities for younger workers.

In his book and in a recent interview with me, Gordon asserts—with some convincing evidence—that soon the United States will not be able to meet its requirements for broadly educated, technically trained professionals to maintain our standard of living and competitive innovation.

Current strategies of outsourcing or obtaining visas for foreign workers, he says, won't yield good results long-term. Why? Because India and China, as well as other developing nations, will suffer similar shortages. Their physical and educational infrastructures are inadequate to sustain their current rates of growth.

Though high wage, low skill jobs may be gone forever from the United States, opportunities for high wage, high skill jobs—and for improved

Technical talent will be in short supply.

quality of life—will increase with our ability to educate and to innovate.

Opportunistic Strategies

I asked Gordon for some strategies on preparing for the coming "meltdown." He offered some for individuals, organizations and communities.

Individuals. At all levels, we need to develop ongoing awareness of trends in technology. Where are new developments in software, hardware and other products coming from? How are new technologies from outside the United States being adapted for innovation? What skills are required to work in developing fields?

Two-year degrees may be the answer in some fields, and because the half-life of technical knowledge is ever shortening, skills require continual updating. Formal evidences of training—continuing education units and certifications—will be valuable only if they are based on real learning.

Organizations. Corporations and professional societies need to take skills development seriously. Gordon decries what he sees as serious lapses in corporate commitment to substantive training. Putting some courses online without serious consideration of curriculum or learners' needs is no solution.

One of Gordon's central tenets is that only those who understand competitive advantage is based on human capital will prosper long-term. His website (www.imperialcorp.com) even includes a free tool to calculate training return on investment.

Gordon expects in-house training to make a comeback after 2010. That, in itself, may offer career opportunities for those whose passions are teaching

and learning. In fact, he says, "The best opportunities will come to those who want to remain smart workers."

Communities. The foundation for U.S. competitive advantage is the community. In *The 2010 Meltdown*,² Gordon provides rich examples of how collaborative efforts have paid off in building the economies of areas struck by job loss.

These efforts are especially important because globalism is not about to disappear—we have to compete with other nations for business. Corporations will locate where there are highly trained, well-educated workers.

If your community denies resources to education, if its approach to general and technical education, K-12 and beyond, is defensive and reactive, you should get involved in reform efforts. If attitudes and systems can't be changed, you should consider moving because the community is in peril.

Who Will Benefit?

So, who should take note? Anyone who wants a meaningful career. We have several generations at work now, with more of us wanting to remain in the workforce beyond traditional retirement age. Those of any age with high skill levels and the know-how to learn and transfer knowledge should have increased employment opportunities.

ASQ and its members should remain leaders and role models in demonstrating how training enhances competitive advantage. We should also leverage the work of our divisions and sections in improving the quality of education and community development.

The future is here—2010 is less than four years away.

REFERENCES

1. Edward E. Gordon, *The 2010 Meltdown: Solving the Impending Jobs Crisis*, Praeger, 2005.
2. Ibid.

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THE COMING WORKER MELTDOWN

World is caught between old skills and high-tech needs

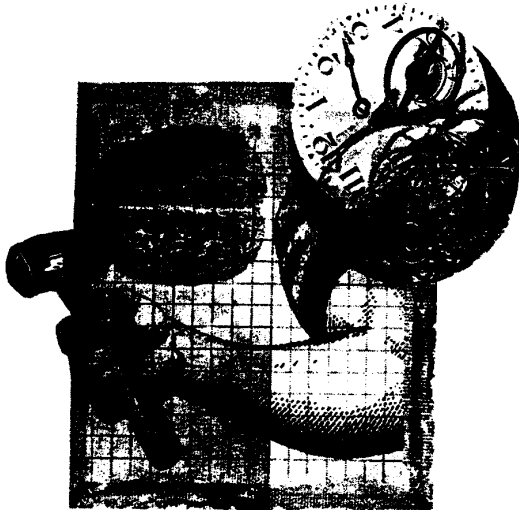
Unfortunate convergence of economic factors points to a shortfall in trained employees

By Edward E. Gordon

A unique combination of events—the accelerated rise of advanced technologies, globalization after the fall of communism, the 1990s stock-market bubble and its collapse, and a massive number of people retiring—have combined to produce a potential 2010 workforce meltdown.

The 79 million Baby Boomers who are running the world's industrial economies will retire between 2010 and 2025. A smaller Generation X, with 40 million people and fewer entry-level "smart" workers, will take over. A great mismatch of too many low-skilled workers and too many high-skill jobs is set to reach stellar heights. As these high-skill jobs go unfilled, American businesses will search the world in vain for more highly skilled, job-ready workers.

According to several studies, between 2010 and 2020 the U.S., Europe, Japan, China and India will face a shortfall of between 32 million to 39 million well-educated, technically specialized "smart people." The current business strategies of outsourcing these high-skill jobs or us-



ment of Illinois. We need to face the facts that in contemporary America there are just too many people trained for the wrong jobs and not enough people preparing for the jobs we are creating.

The career aspirations of much of the population in the U.S. are at serious odds with the increasingly high-tech needs of the economy. Unless this culture lag is resolved in a timely way, a growing labor market imbalance will have serious economic

consequences. The high standards of American life are built on a complex technological and physical infrastructure that everyone takes for granted. Its maintenance is central to the prosperity of our economy.

Many areas of industry and service within our economy are involved, with health care, manufacturing, information technology and the skilled trades constituting particularly critical sectors.

Yet as the Commission on the

Future of the U.S. Aerospace Industry has stated, "The nation's apathy toward developing a scientifically and technologically trained workforce is the equivalent of intellectual and industrial disarmament... and is a direct threat to our nation's capability to continue as a world leader."

According to Rick Stephens, senior vice president of human resources at Boeing Corp., "The shrinkage of a U.S. technically able workforce is the greatest threat to our national security."

Many Americans already are responding to the 2010 challenge. Intel, Microsoft, IBM and others are investing more than \$50 billion each year in worker retraining and student career education programs.

Many communities have organized a variety of non-governmental organizations (NGOs), such as Bridge to Careers of Santa Ana, Calif., the Philadelphia Academies Inc. or the Tulsa Technology Center. These intermediary agencies help bridge the chasm that separates the business and labor markets from education and career preparation.

The NGOs seek to retrain adult workers through a variety of education and skills programs attuned to the needs of local labor markets. They also strive to reinvent an outmoded educational system that traditionally has sorted students into

two groups: "the best and the brightest" going to college and the others who won't.

These NGO alternatives place all students in local liberal arts/career academies that prepare everyone for post-secondary education. The major objective is that most students will complete a post-secondary, two- or four-year degree or an occupational program certificate.

NGOs can facilitate a 21st Century career culture that better prepares students and adults for the careers of a technologically driven, globally competitive society. Chicago's Renaissance 2010 Program is focused on developing 100 special academies. But Chicago has 600 public schools. Will it take an entire generation to reinvent education in Chicago? Do we have the time?

America needs to embark on a new era of reconstruction to avoid a 2010 meltdown. The future depends on our individual and collective will to make the necessary culture changes now for a new America and a new Illinois.

Edward E. Gordon is the author of "The 2010 Meltdown: Solving the Impending Jobs Crisis." He also serves on the Chicago Workforce Board and the Education Workforce Committee of the Chicagoand Chamber of Commerce.