

Preparing America's Workforce:
Are We Looking in the Rear-View Mirror?

by

Alan S. Blinder
Princeton University

CEPS Working Paper No. 135
October 2006

I am grateful to Princeton's Center for Economic Policy Studies for research support.

Preparing America's Workforce: Are We Looking in the Rear-View Mirror?

The great conservative political philosopher Edmund Burke, who probably would not have been a reader of *The American Prospect*, once observed, "You can never plan the future by the past." But when it comes to preparing the American workforce for the jobs of the future, we may be doing just that.

For about a quarter-century, demand for labor appears to have shifted toward the college-educated and away from high school graduates and dropouts. This shift, most economists believe, is the primary (though not the sole) reason for rising income inequality, and there is no end in sight. Economists refer to this phenomenon by an antiseptic name: skill-biased technical progress. In plain English, it means that the labor market has turned ferociously against the low skilled and the uneducated.

In a progressive society, such a worrisome social phenomenon might elicit some strong policy responses, such as more compensatory education, stepped-up efforts at retraining, reinforcement (rather than shredding) of the social safety net, and so on. You don't fight the market's valuation of skills; you try to mitigate its more deleterious effects. We did a bit of this in the United States in the 1990s, by raising the minimum wage and expanding the EITC. Combined with tight labor-markets, these measures improved things for the average worker. But in this decade, little or no mitigation has been attempted. Social Darwinism has come roaring back.

With one big exception: we have expended considerable efforts to keep more young people in school longer (e.g., reducing high school dropouts and sending more kids to

college) and to improve the quality of schooling (e.g., via charter schools and No Child Left Behind). Success in these domains may have been modest, but not for lack of trying. You don't have to remind Americans that education is important; the need for educational reform is etched into the public consciousness. Indeed, many people view education as the silver bullet. On hearing the question "How do we best prepare the American workforce of the future?" many Americans react reflexively with: "Get more kids to study science and math, and send more of them to college."

Which brings me to the future. As I argued in a recent article in *Foreign Affairs* magazine,¹ the greatest problem for the next generation of American workers may not be lack of education, but rather "offshoring"—the movement of jobs overseas, especially to countries with much lower wages, like India and China. Manufacturing jobs have been migrating overseas for decades. But the new wave of offshoring, of *service* jobs, is something different.

Traditionally, we think of service jobs as being largely immune to foreign competition. After all, you can't get your hair cut or your broken arm set by a barber or doctor in a distant land. But stunning advances in communication technology, plus the emergence of a vast new labor pool in Asia and Eastern Europe, are changing that picture radically, subjecting millions of presumed-safe domestic *service* jobs to foreign competition. And it is not necessary actually to *move* jobs to low-wage countries in order to restrain wage increases; the mere *threat* of offshoring can put a damper on wages.

Service-sector offshoring is a minor phenomenon so far, Lou Dobbs notwithstanding; probably well under 1% of U.S. service jobs have been outsourced. But I believe that

service-sector offshoring will eventually exceed manufacturing-sector offshoring by a hefty margin—for three main reasons. The first is simple arithmetic: There are vastly more service jobs than manufacturing jobs in the United States (and in other rich countries). Second, the technological advances that have made service-sector offshoring possible will continue and accelerate, so the range of services that can be moved offshore will increase ineluctably. Third, the number of, e.g., Indian and Chinese workers capable of performing service jobs offshore seems certain to grow, perhaps exponentially.

I do not mean to paint a bleak picture here. Ever since Adam Smith and David Ricardo, economists have explained and extolled the gains in living standards that derive from international trade. Those arguments are just as valid for trade in services as for trade in goods. There really *are* net gains to the U.S. from expanding service-sector trade with India, China, and the rest. The offshoring problem is not about the adverse nature of what economists call the economy's eventual *equilibrium*. Rather, it is about the so-called *transition*—the ride from here to there. That ride, which could take a generation or more, may be bumpy. And during the long adjustment period, many U.S. wages could face downward pressure.

Thus far, only American manufacturing workers and a few low-end service workers (e.g., call center operators) have been competing, at least potentially, with millions of people in faraway lands eager to work for what seems a pittance by U.S. standards. But offshoring is no longer limited to low-end service jobs. Computer code can be written overseas and emailed back to the United States. So can your tax return and lots of legal work, provided you do not insist on face-to-face contact with the accountant or lawyer. In

¹ Alan S. Blinder, "Offshoring: The Next Industrial Revolution?" *Foreign Affairs*, March/April 2006, pp. 113-128. A longer version, with appropriate scholarly footnotes and references, appeared as "Fear of

writing and editing this article, I communicated with the editors and staff of *The American Prospect* only by telephone and email. Why couldn't they (or I, for that matter) have been in India? The possibilities are, if not endless, at least vast.

What distinguishes the jobs that cannot be offshored from the ones that can? The crucial distinction is *not*—and this is the central point of this essay—the required levels of skill and education. These attributes have been critical to labor market success in the past, but may be less so in the future. Instead, the new critical distinction may be that some services either *require* personal delivery (e.g., driving a taxi and brain surgery) or are *seriously degraded* when delivered electronically (e.g., college teaching—at least, I hope!), while other jobs (e.g., call centers and keyboard data entry) are not. Call the first category *personal services* and the second category *impersonal services*. With this terminology, I have three main points to make about preparing our workforce for the brave, new world of the future.

First, we need to think about, plan, and redesign our educational system with the crucial distinction between personal service jobs and impersonal service jobs in mind. Many of the impersonal service jobs will migrate offshore, but the personal service jobs will stay here.

Second, the line that divides personal services from impersonal services will move in only one direction over time, as technological progress makes it possible to deliver an ever-increasing array of services electronically.

Third, the novel distinction between personal and impersonal jobs is quite different from, and appears essentially unrelated to, the traditional distinction between jobs that do and do not require high levels of education.

Offshoring,” CEPS Working Paper No. 119, Princeton University, December 2005.

For example, it is easy to offshore working in a call center, typing transcripts, writing computer code, and reading X-rays. The first two require little education; the last two require quite a lot.² On the other hand, it is either impossible or very difficult to offshore janitorial services, working in a fast-food restaurant, college teaching, and open-heart surgery. Again, the first two occupations require little or no education, while the last two require a great deal. There seems to be little or no correlation between educational requirements (the old concern) and how “offshorable” jobs are (the new one).

If so, the implications could be startling. A generation from now, civil engineers (who must be physically present) may be in greater demand in the U.S. than computer engineers (who don’t). Similarly, there might be more divorce lawyers (not offshorable) than tax lawyers (partly offshorable). More imaginatively, electricians might earn more than computer programmers. I am not predicting any of this; lots of things influence relative demands and supplies for different types of labor. But it all seems within the realm of the possible as technology continues to enhance the offshorability of even highly-skilled occupations. What does seem highly likely is that the relative demand for labor in the United States will shift away from impersonal services and toward personal services, and this shift will look quite different from the familiar story of skill-biased technical progress. So Burke’s warning is worth heeding.

I am *not* suggesting that education will become a handicap in the job market of the future. On the contrary, to the extent that education raises productivity and that better-educated workers are more adaptable and/or more creative, a wage premium for higher

² Two caveats: First, some call center operators must have high levels of skill and education—e.g., the person you get on the phone when your computer malfunctions. Second, Frank Levy and Kyoung-Hee Yu (“Offshoring of Professional Services: Radiology Services from India”, unpublished manuscript, MIT,

education should remain. Thus, it still makes sense to send more of America's youth to college. But, over the next generation, *the kind of education* our young people receive may prove to be more important than *how much education* they receive. In that sense, a college degree may lose its exalted "silver bullet" status.

Looking back over the past 25 years, "stay in school longer" was excellent advice for success in the labor market. But looking forward over the next 25 years, more subtle occupational advice may be needed. "Prepare yourself for a high-end personal service occupation that is not offshorable" is a more nuanced message than "stay in school." But it may prove to be more useful. And many non-offshorable jobs—such as carpenters, electricians, and plumbers—do not require college education..

The hard question is how to make this more subtle advice concrete and actionable. The children entering America's educational system today, at age 5, will emerge into a very different labor market when they leave it. Given gestation periods of 13-17 years and more, educators and policy-makers need to be thinking *now* about the kinds of training and skills that will best prepare these children for their future working lives. Specifically, it is essential to educate America's youth *for the jobs that will actually be available in America 20-30 years from now*, not for the jobs that will have moved offshore.

Some of the personal service jobs that will remain in the United States will be very high-end (doctors), others will be less glamorous though well-paid (plumbers), and some will be "dead-end" (janitor). We need to think long and hard about the types of skills that best prepare people to deliver high-end personal services, and how to teach

March 2006) have shown that, while technology permits the offshoring of radiology, regulations generally prohibit it. This may change in time.

those skills in our elementary and high schools. I am not an education specialist, but it strikes me that, for example, the central thrust of No Child Left Behind is pushing the nation in exactly the wrong direction. I am all for accountability. But the nation's school system will not build the creative, flexible, people-oriented workforce we will need in the future by drilling kids incessantly with rote preparation for standardized tests in the vain hope that they will perform as well as memory chips.

Starting in the elementary schools, we need to develop our youngsters' imaginations and people skills as well as their "reading, writing, and 'rithmetic." Remember that kindergarten grade for "works and plays well with others"? It may become increasingly important in a world of personally-delivered services. Such training probably needs to be continued and made more sophisticated in the secondary schools, where, for example, good communications skills need to be developed.

More vocational education is probably also in order. After all, nurses, carpenters, and plumbers are already scarce, and we'll likely need more of them in the future. Much vocational training now takes place in community colleges; and they, too, need to adapt their curricula to the job market of the future.

While it is probably still true that we should send more kids to college and increase the number who study science, math, and engineering, we need to focus on training more college students for the high-end jobs that are unlikely to move offshore, and on developing a creative workforce that will keep America incubating and developing new processes, new products, and entirely new industries. Offshoring is, after all, mostly about following and copying. American needs to lead and innovate instead, just as we have in the past.

Educational reform is not the whole story, of course. I suggested at the outset, for example, that we need to repair our tattered social safety net and turn it into a retraining trampoline that bounces displaced workers back into productive employment. But many low-end personal service jobs cannot be turned into more attractive jobs simply by more training—think about janitors, fast food workers, and nurse’s aides, for example. Running a tight labor market would help such workers, as would a higher minimum wage, an expanded EITC, universal health insurance, and the like.

Moving up the skill ladder, employment is concentrated in the public or quasi-public sector in a number of service occupations. Teachers and health-care workers are two prominent examples. In such cases, government policy can influence wages and working conditions directly by upgrading the structure and pay of such jobs—developing more professional early childhood teachers and fewer casual child-care workers for example—as long as the taxpayer is willing to foot the bill. Similarly, some services such as registered nurses are in short supply mainly because we are not training enough qualified personnel. Here, too, public policy can help by widening the pipeline to allow more workers through. So there are a variety of policy levers that might do some good—if we are willing to pull them.

But all that said, education is still the right place to start. Indeed, it is much more than that because the educational system affects the entire population and because no other institution is nearly as important when it comes to preparing our youth for the world of work. As the first industrial revolution took hold, America radically transformed (and democratized) its educational system to meet the new demands of an industrial society. We may need to do something like that again. There is a great deal at stake here. If we

get this one wrong, the next generation will pay dearly. But if we get it (close to) right, the gains from trade promise coming generations a prosperous future.

The somewhat inchoate challenge posed here—preparing more young Americans for personal service jobs—brings to mind one of my favorite Churchill quotations: “You can always count on Americans to do the right thing—after they’ve tried everything else.” It is time to start trying.