
THE GREAT AMERICAN JOB HUNT

During the past dozen years, the U.S. economy has created vast numbers of new jobs. Not only have the usual newcomers and millions of immigrants found work, but unprecedented numbers of women have been accommodated as well. Yet "good" jobs—offering reasonable security and steadily rising pay—have become increasingly scarce. Jobs may be plentiful, but massive layoffs, stagnant incomes, and families struggling to get by on two paychecks make it hard to cheer. Our authors explain what is happening, and why. Paul Osterman surveys the prospects of the young. Paul Krugman examines the impact of new technology. Thomas Muller sizes up the effects of immigration.

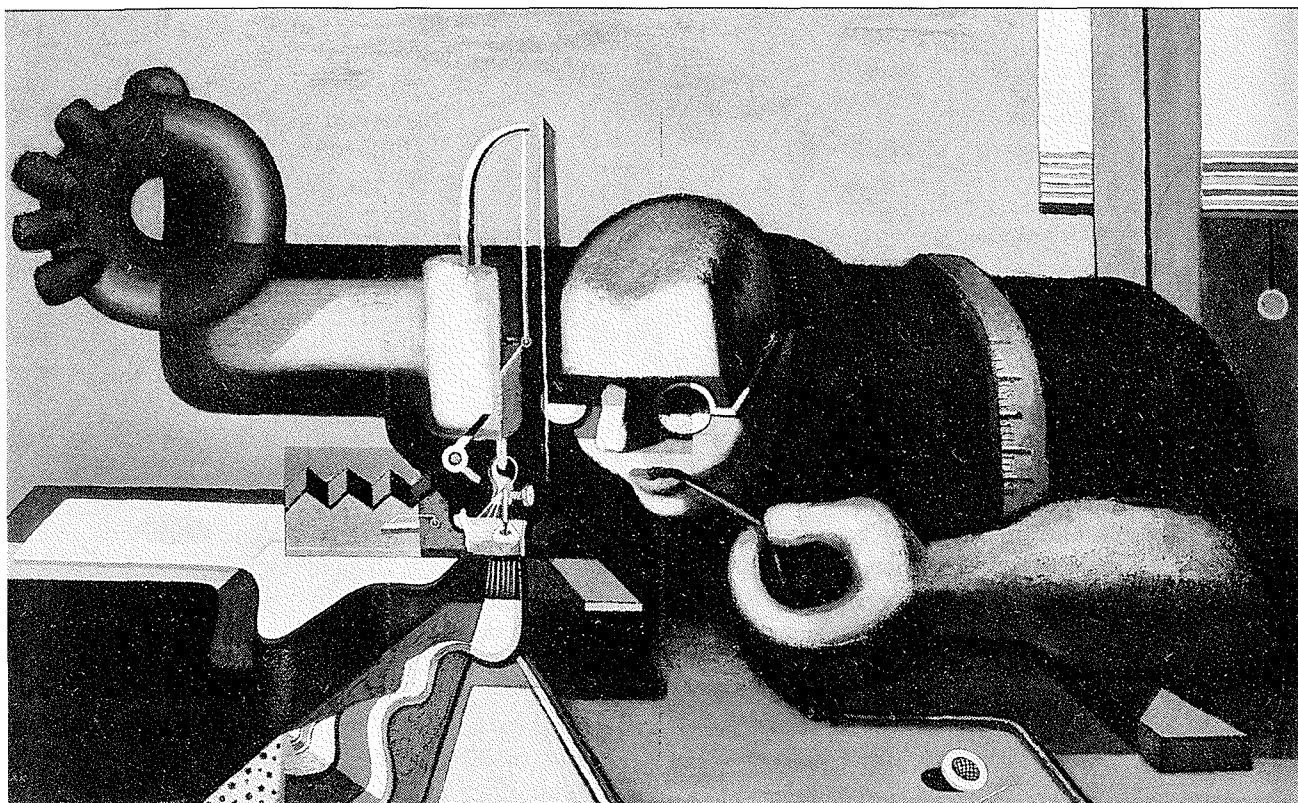
Laura L. Nash considers the "virtual job" of the future.

GETTING STARTED

BY PAUL OSTERMAN

We live in an age of anxiety about jobs, and perhaps the greatest anxiety is felt by young people searching for their first employment. All the other dangers and discontents of the world of work—from stagnant wages to insecurity bred by corporate "re-engineering"—seem to form a dark ceiling over those who are putting their feet on the lowest rungs of the ladder. Not only must today's young endure a larger-than-usual share of the uncertainties of starting out, but they must contemplate a future that

seems truncated and unpromising. The news media have cast them as an "edgy," cynical, and disheartened "Generation X," the first generation in American history, we are constantly told, that cannot look forward to a future better than its parents had. A staple of the Generation X story is the young person who invested in four years of college and yet finds himself in a job well below what he expected, both in terms of what it demands and what it pays. The *Washington Post* tells of college graduates forced to take unpaid internships because real jobs are unavailable. *Time* says it



Man at Machine, by Theodore Roszak

all in a headline: "Bellboys With B.A.'s."

There is a crisis among young people who are trying to get started in life, but it is not quite the crisis that the news media describe and its causes are not quite what one might expect. The facts simply do not support a terribly gloomy view of the immediate prospects for the middle-class, college-educated kids who are generally labeled Generation X. It is true that wage growth, an important part of the escalator of upward mobility, has slowed or ended, and it is far from certain that the old more-or-less automatic increases will resume. College-educated men aged 25 to 29, for example, earned an average of \$28,963 in 1992, roughly the same amount in real dollars as in 1983. (Their female peers, however, improved their earnings by a bit more than 10 percent.) But while average pay may not have increased, college grads still get good jobs, jobs

that give them responsibility, decent pay, room for a little creativity, and opportunities for advancement. In the boom years of 1984–86, about 47 percent of newly hired college grads in their twenties landed jobs in top-shelf occupations, as executives, managers, or professionals. The years 1989–91 saw a slight decline, to 45 percent, but this hardly represents a collapse of the job market. And another 40 percent of the 1989–91 crowd landed jobs in other desirable areas: technical work, sales, and administration, including jobs as various as air traffic controller, cashier, stockbroker, and ticket and reservations agent.

Slow economic growth has increased the risks facing college graduates and ratcheted up their anxiety. On university campuses a more somber career-oriented atmosphere prevails, shock-



Don't cry for today's college graduates. They may sometimes have trouble finding jobs, but they earn about \$9,000 more than high school graduates.

ing the visiting journalists who came of age in sunnier and, some would say, dreamier days. It takes more time and more effort to get a good job, and often the pay is disappointing. Nonetheless these young people are still in relatively good shape.

The young people who face true difficulty are those with less education. They are in fact the great majority of young jobseekers. In 1992, only 23 percent of 25 to 29-year-olds had a college degree. Another 48 percent had some college or an associate's degree. Sixteen percent had only a high school diploma, and 13 percent lacked even that. In the past, there was a fairly reliable route that kids without college could follow. After high school and perhaps a year or two of college, they churned through a succession of less-than-desirable jobs before settling down. Instead of learning job skills in school, they went through an extended period of what economists call "labor market adjustment." They might work a string of jobs as retail clerks, construction workers, or unskilled factory hands, punctuated by short spells of more-or-less voluntary unemployment. Then, as now, many twentysomethings were not ready for permanent jobs. They

were mainly interested in earning some spending money for an apartment and a car and, perhaps, in having a little fun with their coworkers on the job. Few cared much what kind of job it was.

With age, maturity, and new family responsibilities later in their twenties, these people settled down into "adult jobs," but the paths they followed were many and varied. Credentials were less important than personal

contacts, and many found their adult jobs through the help of parents, relatives, and friends. The young man who followed his father into a particular factory or mine might not have been typical, but his informal way of getting started was. Uncle Bob might pull some strings for you at the union hall or Mom's best friend might tip you off to an opening in the billing office. This system, if it can be called that, succeeded for most people because jobs were plentiful and because most of the skills workers needed could be learned on the job. Today many young men and women cannot count on either the old routes or the old destinations. The factory likely is silent, the union hall half empty, and the help-wanted ads full of jobs requiring specialized skills. Ready to make the leap into adulthood, these young people find there is no obvious place to land.

The system still works for large numbers of high school graduates; most move gradually from "youth jobs" to "adult jobs." The National Longitudinal Survey of Youth, which followed a group of young people between 1979 and 1988, offers a sharper picture of the problem areas. It found that 44 percent of 16 to 19-year-olds worked in wholesale or retail

Paul Osterman is professor of human resources and management at the Massachusetts Institute of Technology. He is the author of Getting Started: The Youth Labor Market (1980), Internal Labor Markets (1984), Employment Futures: Reorganization, Dislocation, and Public Policy (1988), and co-author of The Mutual Gains Enterprise (Harvard Business School Press, forthcoming). Copyright © 1994 by Paul Osterman.

trade, which offers mostly low-paying and high-turnover positions. But by ages 29 to 31 the fraction employed in this sector was down to only 17 percent. Moreover, the study shows steadily growing work commitment among the young people. Only 3.5 percent of the oldest men in the study and four percent of the oldest women were unemployed at the time of the last interview. All of this suggests that the process of integrating the young into the workplace is going fairly well. Yet one also needs to know whether the jobs are steady and whether people are enjoying long stretches without unemployment. Here the news is more troubling. Among employed 29 to 31-year-old high school graduates who did not go to college, more than 30 percent had not been in their position for even a year. Another 12 percent had only one year of tenure. The pattern was much the same for women who had remained in the labor force for the four years prior to the survey. These are adults who, for a variety of reasons—a lack of skills, training, or disposition—have not managed to secure “adult” jobs.

For blacks and Latinos, the malfunctioning of the job market has reached a critical stage. In 1993, only 50 percent of young blacks between the ages of 16 and 24 who were not in school even had jobs. Among young Latinos the figure was 59 percent. By contrast, nearly three-quarters of their white counterparts had jobs. (A college degree significantly narrows but does not close the gaps. Ninety percent of white college graduates in the age group were employed, as were 82 percent of the black graduates and 85 percent of the Latinos.)

Young people in many other industrialized countries have a lot more help getting started. In Germany, virtually all students except the small number bound for universities spend the last three years of high school in an apprenticeship system that combines part-time schooling with training in factories, labs, and offices. For each of some 400 recognized occupations there is a standardized curriculum that specifies the

skills to be taught on the job and the content of schooling. The system is overseen by committees of representatives from government, business, and unions. After formal examinations at the end of high school, new graduates are placed in “adult” jobs, often with the company that trained them.

Not all German apprentices can find employment in their field; the Germans, a notoriously well-fed people, joke that they always seem somehow to turn out too many bakers. Yet inculcating the essentials of workplace behavior—be prompt, dress properly, follow instructions—is nearly as important a function of the system as teaching particular skills. The German system has other drawbacks. Women are still “gender tracked” into fields such as hairdressing, and the system can be slow to react to technological change in the workplace. Still the training and placement help German youngsters receive are far superior to what is available to their American peers.

In Japan, the process of launching the young into the world of work is not so highly organized as it is in Germany, but it is still far more structured than in the United States. Teachers maintain contacts with employers and play an important role in placing high school graduates. In Japan, as in Germany, the first job is a giant step into the work world. The years of casual, American-style “job shopping” are virtually unknown in these countries, and especially in Japan the young are expected to remain with their first employer for a long time. Yet if the American system is less orderly, it also provides much more freedom for the individual to experiment and change his or her mind—highly prized qualities that should not be lost in any attempt at reform.

Finding a steady job is only half the challenge of getting started. Finding one that pays relatively well is the second, and lately most daunting, hurdle. Pay for college graduates has at least stayed even over the years, but high school graduates and (especially) dropouts have lost a lot of ground. There now exists a huge

Does Job Training Work?

If superior skills and education are the keys to success in the job market, then it may seem logical for government to underwrite job-training programs. Yet ambitious initiatives by the Clinton administration have been beaten back and scaled down in Congress. The skeptics' view is summarized by The Economist (March 12, 1994).

Improved training is not the royal road to success in all places at all times. What works for a manufacturing-dominated economy like Germany does not necessarily work for a services-oriented economy like the United States. What works for computer makers does not necessarily work for discount stores. Heavy investment in training cannot compensate for poor management or misguided product strategies, as IBM has found to its cost.

What is more, low skills are not a sentence to unemployment, nor high skills a guarantee of job security. The United States still employs 1.5 times as many janitors as it does lawyers, accountants, investment bankers, stockbrokers, and computer programmers put together. Highly skilled people are losing their jobs as firms "de-layer" middle management and as the federal government cuts its defense budget. . . .

Above all, the pro-training camp hugely overstates the ability of training to curb long-term unemployment. For a growing number of people, particularly in the United States, the real problem lies not in a lack of job-specific skills but in a surplus of social pathologies—too many people with too little self-discipline, self-respect, and basic education to fit easily into any workplace. For another group, the problem lies with age. Most firms prefer 20-year-old recruits to 45-year-old ones because 20-year-olds usually cost less and because they are thought—rightly or wrongly—to be more flexible, more malleable, more likely to turn into "company men."

Even in a world without ageism or an underclass, there would still be huge problems in translating the vision of a "high-skills, high-wage economy" into practice. In theory, the case seems irrefutable for state intervention in the training market through company levies and national schemes; in practice, it is fraught with problems. Training levies, which oblige firms to train their workers or else pay a training tax to the government, squeeze small firms in unprofitable businesses and frequently end up subsidizing useless conferences. National schemes quickly crowd out private schemes, burdening the exchequer and limiting choice; and no scheme can be better than the people who run it, a standard which in practice is not always very high.

The assumption . . . that countries can borrow the

best bits of each other's training systems is also questionable. Training systems rely for their success on the structure of employment in the economy concerned and on the workings of a host of social institutions, informal as well as formal. Intent on producing the caretakers of a sophisticated manufacturing economy, the Germans put great emphasis on teaching the young how machines work, and how to fix them if they break down. But most new American jobs are in the service sector, requiring both social skills and familiarity with information technology.

The German system also depends on a set of social relationships which are entirely absent in the United States. Respected and well-coordinated business organizations allow employers to set national standards; stable shareholdings and long-term bank financing shield companies from some of the pressure for short-term profits. National collective bargaining makes poaching a rarity. Above all, the three members of the "social partnership" play a well-recognized part in making the system work, with employers devoting a proportion of their budgets to training, government providing vocational schools for young trainees, and trade unions moderating wages for new entrants into the labor market.

The Americans ought to be grateful that training systems travel so poorly, because both the German and the Japanese models are beginning to look somewhat tarnished. Although still immensely proud of apprenticeships in public, Germans are beginning to worry about them in private, whispering that a vital source of strength may one day become a fatal source of weakness. Some of these problems are short-term. Unification means that Germany has to find apprenticeships for large numbers of ill-educated and poorly motivated east Germans. The recession is making it hard for big firms, particularly in the car-making and metal-working industries, to afford to keep up their toll of apprenticeships, or to keep on those apprentices once they have spent 3 and 1/2 years training them. Last year, fewer than half of the metal industry's 130,000 apprentices managed to stay on in their firms.

Other problems, however, are deeper. First, apprenticeships are inflexible and antiquated, good at

turning out skilled car workers but bad at producing software programmers or television producers. One result is that Germany has one of the least developed service sectors in Western Europe. Second, the system produces narrow specialists, intent on making their careers as machine engineers or production managers, whereas modern manufacturing techniques demand flexible generalists, capable of turning their hands to a wide range of jobs. In addition, it allows almost no room for retraining, assuming that workers will remain in the same jobs throughout their lives. Third, the system depends on a cooperative relationship with the trade unions, including worker representation on company boards and national wage agreements, which is coming under increasing strain. Worse still, the system is enormously expensive, helping to keep German labor the most expensive in the world. . . .

The Japanese system, which is based on a mixture of a broad, general education in school and prolonged on-the-job training thereafter, is also under unprecedented strain, thanks to the combined forces of recession and a new individualism among the young. The system requires two things to succeed: a guarantee of lifetime employment from the company, and a willingness on the part of the employee to sacrifice all for the firm. The guarantee of a long-term future with the company compensates workers for low starting wages, long hours, company-specific training and job rotation. It also gives them a broad mix of skills and a commanding knowledge of the company's strategy. Employee loyalty gives firms the confidence to invest heavily in training without fear of poaching, and the flexibility to move workers from product to product and place to place as the market demands.

In the short term, the biggest threat to this system comes from recession, with large firms cutting back on recruitment and introducing short-term contracts. In the longer term, however, the biggest threat may come from individualism, with more and more workers opting for higher salaries and individual freedom rather than a lifetime of subordination to a single master.

Surprisingly, the training system which seems to be coping best with technological innovation and global competition is the most maligned of the lot, the American one. The standard criticisms of this system, about poaching, short-termism, and amateurism, have always been overstated. Sensible workers do not

leave firms with good training records for fly-by-night operations just because they are offered a few dollars more. Successful firms take a long-term view of the skills of their work forces, even if they are subject to relentless hounding from the stock market to produce profits. Thanks to the pressure of competition, American plumbers, electricians, and pest controllers are usually as competent as their certificate-toting counterparts in Germany.

Indeed, the American tradition of providing people with masses of general academic education, including a start at university for half the population and plenty of second chances for everyone, and leaving specific training to the market, is becoming more, rather than less, relevant. Economists have long argued that the returns on general education are higher than those on specific training, because education is transferable whereas many skills tend to be job-specific. Today, this case is becoming more compelling still as jobs become less secure, the service sector expands, the life-cycle of vocational skills diminishes, and the market puts an ever greater premium on the ability to deal with people and process information. The most urgent task facing the United States is to reform its highly uneven school system (perhaps through rigorous national exams) rather than to re-invent an apprenticeship system.

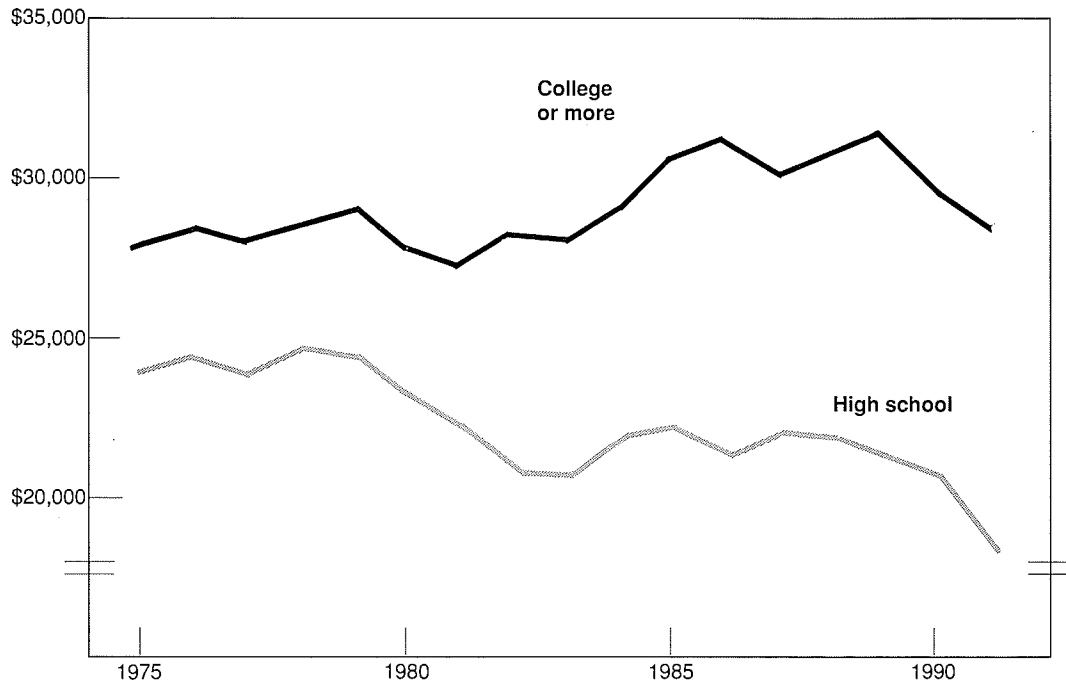
Moreover, a lot of American firms are proving to be remarkably flexible, innovative, and imaginative in their approach to on-the-job training. Shaken by the recession of the early 1980s, and impressed by Japan's capacity to mass-produce customized goods at extraordinary speed, large numbers of American firms are now taking training more seriously than ever.

When General Motors opened a new lorry factory in Fort Wayne, Indiana, it offered its 3,000 workers 633 hours of training each, in order to teach them how to handle new technology and work together in teams. Advanced Micro Devices, a circuit maker, allocates 40,000 hours and \$1 million a year to training its 400 employees. Quad/Graphics . . . treats all workers as "students," organizing them into six-person teams, providing them with "mentors," who are responsible for developing their skills, and giving them one day a week in the classroom.

Clearly, there is much that other rich industrial countries can learn from the United States about the value of general education, the virtues of flexibility, and the desirability of local and corporate initiative.

A Tale of Two Degrees

(Annual Earnings of Men Aged 25 to 29, By Education, in Constant Dollars)



Source: Housing and Household Economic Statistics Division, U.S. Bureau of the Census

pay gap between the college educated and their less fortunate peers. Between 1979 and 1991, the real wages of high school dropouts fell more than 20 percent, and the wages of high school graduates without college degrees fell more than 11 percent. People equipped with only a high school degree are finding it increasingly difficult to earn a decent living. According to a recent U.S. Census Bureau report, nearly half of all 18 to 24-year-olds who worked full time in 1992 still had annual incomes below \$14,335, the poverty line for a family of four.

The labor market is sending a clear signal. While the American way of moving youngsters from high school to the labor market may be imperfect, the chief problem is that, for many, even getting a job no longer guarantees a decent standard of living. More than ever, getting ahead, or even

keeping up, means staying in school longer.

While many things may have contributed to the erosion of wages over the past two decades, including the oft-cited influxes of cheap immigrant labor and cheap imported goods, the new premium on skills explains much of what has happened. When new technologies are combined with new ways of organizing work, such as team production or total quality management programs, the need for various kinds of skills rises. Today, employees are asked to understand and analyze certain kinds of data, to think about ways to improve the processes and products of the workplace, and to work with others to bring improvements about. No longer is it enough to perform rote tasks on an assembly line.

In part, employers are looking for better command of "hard" skills such as math,

and the best evidence for this is the fact that they are willing to pay for such hard skills with hard cash. Economists Richard Murnane, John Willett, and Frank Levy recently found that, six years after graduation, members of the high school class of 1986 who had scored in the top third of a standardized math test were earning 16 percent more than those who had scored in the bottom third. In the class of '72, by contrast, top scorers enjoyed an edge of only five percent six years after graduation.

This is a graphic illustration of the growth in demand for relatively simple math skills. And they are "relatively simple." Skills of this sort are not out of reach for most people. The question is whether the schools can do a good job of providing them. The answer is a little more textured than the bitter criticisms of political leaders and employers suggest. In fact, there is little reason to believe that schools are providing worse training than in the past. Scores on the National Assessment of Educational Progress, which declined during the 1970s, generally rose during the 1980s. Kids in most age groups scored slightly higher on most tests at the end of the '80s than they did in the early '70s. High school dropout rates have even improved a bit: In 1972, 16.1 percent of 19 to 20-year-olds lacked a high school diploma and were not enrolled in school. By 1991, that number was down to only 14.3 percent.

The real problem appears to be that jobs (and employers) are requiring ever-higher levels of skill, and that the schools, though moving slowly forward, are failing to keep up. Test scores have not declined, but they are not very impressive either. The National Assessment of Educational Progress, for example, offers the depressing claim that 30 percent of young people lack basic literacy skills (e.g., the ability to collect information from different parts of a document) and that 44 percent of 17-year-olds cannot compute with decimals, fractions, and percentages.

And while it is nice that dropout rates are not rising, they are still too high, especially among minority groups: 17 percent of young blacks and 36 percent of Latinos are dropouts.

Employers, moreover, are not simply looking for technical skills. The workplace of the 1990s, with its team-oriented approach and quality programs, requires people who are able to work cooperatively with others. They need good interpersonal skills. The same is true in the service sector—from fast-food restaurants to airlines—where there is a growing emphasis on pleasing the customer. When asked in a survey conducted by the National Association of Manufacturers why they rejected job applicants (more than one reason could be given), 37 percent of employers cited writing skills and 27 percent cited math skills, but 64 percent cited ability to adapt to the workplace.

Thus, despite all the talk of a "de-skilled" nation of hamburger flippers, the American labor market is demanding more and more skill. Although unskilled service-sector work has certainly grown, so has the quantity of more demanding work. Indeed, the U.S. Bureau of Labor Statistics projects that between now and 2005 the occupational group with the fastest growth rate will be "professional specialty" jobs—such as engineering, the health-care professions, and teaching—almost all of which require at least some college. Growth in executive, administrative, managerial, and technical occupations will also be faster than average.

It is important for those who would fix the American system to put aside utopian thoughts. Getting started will always be a difficult, anxiety-producing experience. Moreover, young people are and will continue to be marginalized in virtually every labor market in the world. Even Germany does this, albeit subtly, by placing them mostly in apprenticeships at small firms, where long-term career prospects are not good. Young people simply lack the skills and maturity of their elders, and in any

The Minimum Wage Debate

Until the Clinton administration took office last year, the federal minimum wage was largely a moot issue. Stuck at \$3.35 an hour during the 1980s, it was finally raised by 1989 legislation to \$4.25, still roughly \$1.50 less in real terms than it was in the 1970s. It was not only the opposition of a Republican White House that kept the minimum down until 1989, however, but the fact that economists generally agreed that increases in the minimum wage cost jobs.

Today the White House is occupied by a Democrat and the chief economist at the U.S. Department of Labor is one of the authors of intriguing new research that suggests that increases in the minimum wage are pain free. Economists Lawrence Katz, then of Harvard University, and Alan Krueger of Princeton, looking at a collection of Burger Kings, Wendy's, and other fast food emporia in Texas, found that the increases actually *raised* employment a bit. (Perhaps, they reasoned, the old minimum was so low that the restaurants that offered it were not able to attract and keep enough employees.) Their study appeared in *Industrial and Labor Relations Review* (October 1992). It was accompanied by a report by David Card, also of Princeton, who compared employment in states that raised minimum wages before Washington did with those that did not. Card backed up Katz and Krueger. Increasing the minimum put more money in the pockets of hamburger flippers and janitors without causing employers to trim jobs.

These challenges to the conventional wisdom have not gone unanswered. Other recent studies have confirmed the earlier view: A 10 percent increase in the minimum, they suggest, causes roughly a one to two percent loss in employment.

Meanwhile, many observers note that the minimum wage is not nearly so important as it once was. Because many employers increased wages on their own, the number of Americans working for the minimum wage or less dropped from eight million in 1980 to four million in 1993. That equals 6.6 percent of the labor force.

Moreover, a lot of those \$4.25-per-hour-and-under workers are teenagers from relatively affluent families working part-time for

pocket money. More than two-thirds of all minimum wage workers are part-timers, and the vast majority are single and without family responsibilities. Only about 20 percent live below the poverty line.

Since its inauguration in 1939, the minimum wage has been seen chiefly as a poverty-fighting tool—and by organized labor as a useful floor under wages. Today, critics argue, more effective antipoverty tools exist. In a study for the employer-backed Employment Policies Institute, for example, Richard Burkhauser of Syracuse University and Andrew Glenn of Vanderbilt University argue that upper-income households were the biggest beneficiaries of the 1989 minimum wage hike, reaping a bigger share of the estimated \$4.2 billion one-year income boost it produced than did poor and near-poor families. A much more effective way to help the working poor, Burkhauser and Glenn contend, is by expanding the federal Earned Income Tax Credit. If Congress had increased this tax break for low-income workers by \$4.2 billion in 1989, they estimate, poor and near-poor families would have captured two-thirds of the benefits.

The problem with this approach, of course, is that it would cost the U.S. Treasury \$4.2 billion. The minimum wage can be raised without directly increasing the federal budget deficit.

The bottom line, many economists seem to agree, is that a minimum wage increase of roughly 10 percent, as the Clinton administration has been contemplating, would be relatively harmless. At worst, it would cost 80,000 jobs. Without question, it would boost the pay of a full-time minimum wage worker, now earning \$8,840 annually, to around \$10,000. It might help some young people who are just starting out, and it would lift a number of families over the poverty line. But an increase to something like \$6 per hour, which organized labor reportedly favors, would be an entirely different issue.

In any event, the minimum wage once again seems largely a moot issue. As long as health-care reform, with its own potentially job-killing employer mandates, dominates the national agenda, there will not be much eagerness to risk raising the minimum.

event it makes sense to reserve most good jobs for people with adult responsibilities.

Harkening to the German example, American policymakers have focused on the need to strengthen links between local schools and employers. The Clinton administration's new School to Work Opportunities Act, budgeted at \$100 million this year, encourages employers to provide on-the-job training and encourages schools to reformulate their curricula to include real-world examples that can be used both to motivate and to teach. The new "tech-prep" education, unlike the old vocational education, seeks to give teenagers serious instruction in traditional academic disciplines. The hope is that by appealing to a bigger slice of the teenage population, the low-prestige, second-rate taint of old-fashioned vocational education will be avoided. Making all of this work in the highly decentralized American system will be difficult. Individual school systems must be persuaded to rethink how material is taught. Without strong Euro-

pean-style employers' associations, there has to be firm-by-firm recruitment of "good" employers to train students and hire graduates. Still, the effort is well worth making.

Ultimately, however, helping the young find good jobs is more than a matter of tinkering with what happens to teenagers in school and on the job. One of the top requirements in today's job market is schooling beyond high school. This means that increased financial aid to help more youngsters attend college must be a high priority. Likewise, the employment problems of black and Latino youngsters owe much to a daunting array of larger urban ills, from crime to inferior education, for which narrowly focused programs—with the exception of the tiny Job Corps—have been unable to compensate. Overcoming this group's special problems will require large helpings of collective as well as individual ambition and initiative.