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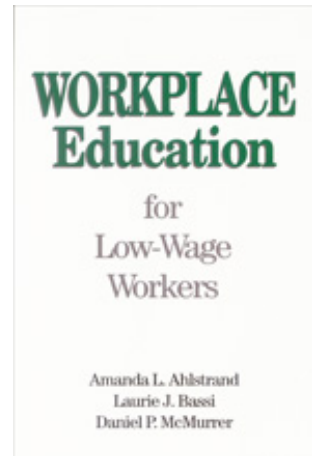
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## Introduction and Previous Research

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**Workplace Education for Low-Wage Workers**

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# 1

## Introduction and Previous Research

The world economy is in the midst of a titanic shift. In comparison with their evolution from an agrarian to an industrial base, the world's now-developed economies have shifted from an industrial to a knowledge base with unprecedented speed. Nowhere is this more evident than in the United States. The remarkable flexibility exhibited by the U.S. economy has fueled its domination of the technology revolution, and has enabled that revolution to occur without catastrophic economic disruption. However, change of such magnitude and speed as the U.S. economy has recently undergone always produces some disruption.

Frequently, economic disruption takes the form of high unemployment. The U.S. economy, however, has experienced just the opposite. Although the United States is in the midst of a slowdown as this book goes to press, nonetheless its unemployment rates in recent years have been low by the standards of the past few decades.

This time, the expected disruption has come, instead, in the form of a slow but fairly steady decline in the inflation-adjusted wages of much of the workforce. Because of the extraordinary flexibility of the U.S. economy, these wage reductions have not reduced the standard of living for most households; families have supplemented falling wages by working longer hours and, in many cases, by adding a second wage earner.

Nevertheless, the decline in wages—particularly stark for those workers with the least formal education—is worrisome. The resultant increase in income inequality is the subject of inquiry and concern by both scholars and politicians. Increasingly, education is viewed as both the problem and the solution.

This study touches on these broader issues by examining a category of education and training that is not frequently put under the magnifying glass: employers' practices and decision-making processes with regard to workplace education and training for lower-wage workers. It is our hope that the results of the study will both inform public

policy and be of use to employers interested in enhancing the education and training that they provide to lower-wage workers.

## **THE NEED FOR WORKPLACE EDUCATION**

Once people leave the education system, most—perhaps all—of their continuing education and training opportunities are provided through the workplace. Consequently, workplace education is critical if workers are to prosper in a rapidly changing economy. There are two sides to this equation. First, workplace education must be available. That is, there must be an adequate supply. Second, workers must see that it is in their interest to avail themselves of workplace education—that is, there must be demand. Although this is true for all workers, the availability of training opportunities, in the workplace and elsewhere, is particularly important for those workers near the bottom of the income distribution, especially those with low skill levels. These are the workers most likely to be “at risk” in the labor market, many of whom might benefit from significant workplace training opportunities.

For many such workers, however, useful workplace learning opportunities are not available. It is now a well-established research finding that the probability that workers will receive workplace education is directly proportional to their wage and education levels (see, for example, Frazis et al. 1998). Workers with the highest wages and the most formal education receive the most workplace education, while lower-wage workers and those with the lowest levels of education receive the least. This finding is problematic from a public policy perspective, since, as we discuss below, there is reason to believe that workplace education programs (which tend to be tied more closely to actual job requirements) may be more successful in raising earnings among lower-wage workers than are government-provided training programs.

It is clear that those workers who could benefit the most from workplace education are the least likely to get it. It is less clearly understood why lower-wage workers receive less workplace education. The supply side of the equation might be the cause: employers may not perceive it as being in their interest to provide opportunities for ongo-

ing education for workers with fewer skills; they may perceive the benefits of training lower-wage workers to be low (perhaps because of higher turnover rate or lower average cognitive capability) or the costs high. Alternatively, the cause might be a dearth of demand: some (or many) lower-wage or lower-skill workers may not see it as in their interest to pursue such opportunities. The lack of demand may be a more significant obstacle among lower-wage workers than among the population as a whole, because many such workers already choose to curtail their participation in the formal education system at an earlier stage than the average worker. Perhaps the lack of both supply and demand for workplace education among lower-wage workers combine to bring about today's uneven distribution of workplace training.

## **LOWER-WAGE WORKERS**

Lower-wage workers in the United States by no means form a homogenous group. They range from upwardly mobile college students working part-time to former welfare recipients entering the workforce for the first time. The lower-wage status of the former group is likely to be temporary and will be remedied naturally (as they mature, gain experience and additional education, and move from part-time, temporary work to full-time, permanent jobs). For them, a lack of workplace education opportunities may not represent a significant problem.

The same is not true, however, for other lower-wage workers—those whose lower-wage status is unlikely to be ameliorated simply by the passage of time. This group consists disproportionately of women, immigrants, and those with little formal education. For this latter group, a lack of opportunity or incentive to learn new skills at work does represent a significant problem.

Workers at the bottom of the earnings distribution are much less likely to receive education at work than are those with higher earnings. Data from the National Household Education Survey reveal, for example, that in 1995 only 22 percent of workers in the bottom quintile of the earnings distribution reported receiving employer-supported education during the previous year, whereas 40 percent of those in the top

quintile reported receiving such training. Similar findings emerge when the data are tabulated by education level. Moreover, opportunities for informal training (as opposed to formal education and training, which are planned in advance with a specified curriculum) are also unequally available for workers with the least amount of formal education (Bassi 2000).

The best evidence on the impact of workplace education and training indicates that those workers who receive it earn significantly higher wages than comparable workers who do not receive education at work. For example, the wage rate benefit of 40 hours of workplace education is estimated to be 8 percent, which is as large as the return from an entire year of schooling (Frazis and Loewenstein 1999).

Among the needed educational interventions for those workers who are consistently at the bottom of the wage distribution, the most important seem to be courses in the following:

- basic skills, which are often necessary prerequisites for more advanced, job-specific training;
- English as a second language, for those who are not native English speakers;
- computer skills, since computer use is becoming an increasingly important predictor of wage levels; and
- problem-solving and interpersonal skills.

These findings suggest that the distribution of workplace education is a part of the problem. Although workplace education is a potential tool for helping to narrow the gap between those at the top and those at the bottom of the earnings distribution, it is, in fact, not serving that purpose. We might even conjecture that, rather than narrowing the wage gap, workplace education may well be a factor contributing to its growth.

## **EMPLOYERS OF LOWER-WAGE WORKERS**

Given that employer-provided training is important in determining the earnings potential of employees, what factors determine whether

employers choose to provide education and training to their employees? Economic theory predicts that, in fact, employers typically do not find it in their interest, in the absence of external incentives, to provide education and training for “general” skills that have broad applicability (Becker 1962). Yet the skills that are most likely to be needed by lower-wage workers fall into the general skills category.

Although there is substantial evidence (see below) that some employers do indeed provide and finance general training for their employees, Becker’s theory serves to identify factors and disincentives that cause employers to provide less general education and training than they otherwise would. In particular, if an employer pays for education and training that raise an employee’s productivity, then another employer, who did not have to pay for the training, will be able to offer the trained employee a higher wage. That is to say, economic theory predicts that employers who do provide generalized education and training will experience higher turnover as a result, and will be less profitable than employers who don’t provide it. This prediction pertains to all types of workers, at both high and low wage levels.

Several strong assumptions serve as the foundation for this prediction: that labor markets are perfectly competitive; that the wage level is the only factor that determines employees’ choice of an employer; and that employers can, in fact, “buy” the skills that they need by hiring workers with those skills. When the price of buying skills increases (either as a result of growing wage inequality or tight labor markets), there are more economic incentives for employers to choose instead to “make” skills, by providing more and better training to lower-wage workers. But the benefits to employers of doing so must exceed the costs. And as the theory outlined above suggests, underlying forces can make it difficult for employers to recover the investment that they make in general skills training, particularly if their workforce is subject to high turnover rates (as is often the case with lower-wage workers).

## **PREVIOUS RESEARCH**

Gary Becker’s seminal article on investment in human capital laid the foundation for the past four decades of economists’ research on

employer-provided education and training (Becker 1962). As noted above, an important insight that emerges from Becker's work is that in a highly competitive marketplace, employers will not find it in their interest to provide or finance general education and training (if we define "general education and training" as that which raises a worker's productivity for other employers to the same degree that it does for the employer who provided the training).

One obstacle that researchers have faced in exploring the hypotheses coming from Becker's worldview is the paucity of data that are well suited for testing the theory. In recent years, however, the quality of the data has improved. In particular, the Employment Opportunity Pilot Project (EOPP) surveys, the Small Business Administration (SBA) surveys, a survey financed by the W.E. Upjohn Institute, and a unique company-specific database compiled by Bartel (1995) have provided new opportunities for analyzing the decision-making process and outcomes with regard to education and training from the employers' perspective. And the National Longitudinal Survey (NLS) and Current Population Survey (CPS) provide information for analyzing the receipt of training from the workers' perspective, including its impact on wages.

The studies of Barron, Berger, and Black (1999) and Loewenstein and Spletzer (1998, 1999) provide the following insights:

- The theoretical distinction between general and firm-specific training seems in reality to be highly blurred. Much education or training that is provided and financed by employers does, indeed, appear to be "general." Moreover, there is little evidence to suggest that employees "pay for" general education through wage reductions (as is suggested by human capital theory in its purest form).
- Employers experience the benefits of productivity gains that result from their investments in both general and firm-specific training, and can recoup the costs of those investments.
- Similarly, employees who receive either general or firm-specific training enjoy higher wages as a result of those employer-financed benefits (although the wage benefits of general training appear to manifest themselves more in higher wages at subse-

quent jobs, rather than in the form of higher wages with their current employer). (Also see Bartel 1995.)

Barron, Berger, and Black's 1997 analysis demonstrates that, despite improvements in measuring workplace education and training, considerable measurement error remains. They note that such measurement error is likely to lead to a significant underestimation of the benefits of workplace education, both to employers and employees. Despite such potential for underestimation, the benefits (in the form of both higher productivity and higher wages) are seen to be substantial (see, for example, Mincer's 1989 review of the literature, as well as the more recent literature already cited). In fact, the benefits substantially exceed "normal" rates of return, strongly suggesting that the market may fail to produce the socially optimal level of workplace education and training.

In short, the recent literature provides ample evidence that the operation of the labor market is considerably less "perfect" than that required for Becker's predictions to hold on a universal basis. Employers do provide and finance general training. And although both employers and employees benefit from this provision, there is reason to believe (given the above-normal rates of return) that the level of training is suboptimal. The literature is, however, almost completely silent on the issue of potential market failure, as well as on two important and related issues: first, the implications of these labor market "imperfections" for lower-wage workers, and second, the public policy implications of these findings.

We explore these questions, among others, in the research initiative described in the following chapters. Chapter 2 provides some definitions and briefly describes the three phases of the multipart research effort. Chapter 3 discusses phase 1, the analysis of quantitative data contained in a unique database collected by the American Society for Training and Development (ASTD). Chapter 4 explores information of a more qualitative nature, gathered through phase 2, telephone surveys of employers who provide training to lower-wage workers. The next six chapters (5 through 10) discuss phase 3, seven individual case studies of organizations with particularly notable programs for lower-wage worker training (two of the organizations from the health care industry are described in a single chapter; each of the other organizations is cov-



ered in a separate chapter). Chapter 11 summarizes the lessons learned from the case studies. Chapter 12 draws some conclusions and discusses the policy implications of our research.