likely to characterize future labor markets. Given the importance of these issues in the future and the range of evidence discussed, more than two paragraphs on public policy implications, particularly for workers, would have been welcome. But the authors are to be congratulated for providing a comprehensive, data-driven analysis of a complex phenomenon. The book should find a broad audience.

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Human Resources, Management, and Personnel

Workplace Education for Low-Wage Workers. By Amanda L. Ahlstrand, Laurie J. Bassi, and Daniel P. McMurrer. Kalamazoo, Mich.: W.E. Upjohn, 2003. 175 pp. ISBN 0-88099-266-2, \$40.00 (cloth); 0-88099-265-4, \$18.00 (paper).

This book reports on the training programs of seven organizations, with an emphasis on the training of low-wage workers, and considers this experience in the context of Gary Becker's theory of training and human capital. Recall that Becker defined perfectly general training as that which increases the worker's marginal product by exactly the same amount in many firms, and completely specific training as that which increases the worker's productivity only in the firm providing the training. It makes no economic sense, then, to train low-wage employees if they have high turnover rates, as they then become more marketable, demanding market wages or leaving; either way, the firm does not recover the training costs. The book supports the claim of recent literature that less than perfect markets prevail and, as a result, the Beckerian dichotomy is more a way of understanding the additions of human capital at the limits than it is a description of what can be observed in practice.

The authors provide many details as to how they selected the seven organizations, summaries of a larger group of employers' practices, and details on the seven cases themselves. As a series of case studies, the book makes no pretense to be a formal study of the education of low-wage workers; it offers neither new theory nor more than a brief review of recent literature, nor does it present a statistical analysis of the practices of organizations.

The authors use Becker's theory as a starting point and discuss the necessary assumptions leading to its prediction that employers will "provide less general education than they otherwise would." They then quickly survey some of the more recent work showing that the theoretical distinctions between types of training are blurred, that employers who train reap more benefits than theory suggests, and that employees' gains in wages due to their training are often deferred to their next job.

Ahlstrand and her coauthors next examine firms that make substantial investments in education and training of low-wage workers, using ASTD data to identify employers whom they term "lower-wage training intensive" (LWTI). (ASTD, the American Society for Training and Development, is a private association whose purpose is to provide professional development for managers and others who administer workplace training. As a voluntary group, it is not a statistically random sample, and this self-selection problem carries over to the data the ASTD provided to the authors.) The data are taken from the ASTD 1997 and 1998 databases, which cover 1,300 organizations.

The authors identified 192 of these organizations that "provided an unusual amount of education and training to their lower wage workers" using two measures: training time and expenditures. They then conducted telephone interviews with forty of these organizations and subsequently selected eight of these forty to interview on site. The seven case studies report the results of the site interviews, and are selected as those with the best practices rather than as representative of the population even of ASTD members. (There is no explanation of why one of the eight organizations originally selected for study was apparently dropped.)

Work force size varies greatly across the reported cases. CVS, with 100,000 workers, is the largest; the next largest employs 1,800, of which only 1,400 are wage workers; four others employ between 850 and 1,500 wage workers; and the smallest employs only 46 wage workers. (It could be argued that while CVS does employ 100,000, most of these low-wage workers are employed at individual stores and, hence, they too are employed by small employers.) Five of the organizations are non-profit and two are for-profit. Thus the case studies are heavily weighted to the experience of modest-sized, non-manufacturing, non-profit organizations.

Only one manufacturing firm, Lacks Enter-

prises of Grand Rapids, Michigan, is included in the final seven organizations reported upon. Lacks operates plastic injection molding operations at the site visited by the authors. Training is necessary, as the low-wage workers were insufficiently prepared in English (many were recent immigrants), basic computer skills, plastics technology, math, team skills, supervision, and safety. The authors report that Lacks has taken advantage of training subsidies from the State of Michigan to supplement its own efforts and has gained a skilled, loyal work force.

Subsidies are a common way to reduce the costs of general training in most of the case studies. The authors write, "It appeared likely that the (CVS) program would not exist in its current form or scope if it had not been for the incentives provided by the availability of significant government grants." They also observe that most training at CVS is for specific human capital, and that specific capital and general capital are often intermingled in the training programs discussed.

The volume reproduces the questionnaires used for the telephone interviews and on-site interviews; these in themselves would be useful to many researchers. The book also has a helpful index and a modest bibliography, adding to its usefulness. Unfortunately, I searched in vain for a final set of summary tables for the seven case studies. Such a tabulated summary and comparison would have added immensely to the value of this short volume.

In contrast, the tables in Chapters 3 and 4 do offer summary statistics, and they are quite helpful for understanding the data. Particularly revealing is Table 3.3, which suggests that those organizations that trained low-wage workers did so using governmental support, cable TV, teleconferencing, and vendors for specific training, whereas firms that did not have high numbers of LWTI workers used fewer of these resources. Organizations with high numbers of LWTI workers were more likely to mandate such training and to provide job rotation to provide the training, and they checked on the results using annual reviews and quality diagnostics.

The authors' conclusion—that because of supply problems when the labor market is tight, firms will give general training to low-wage workers even though the increased productivity can be transferred to other firms—is not novel. Becker's theory requires certain assumptions about homogeneity of worker skill cohorts, a perfectly competitive labor market with infinitely elastic labor supply and demand, and a clean distinction between firm-specific and gen-

eral human capital in the training provided. Becker recognized that most if not all training has both general and specific elements, so that the human capital increase may be considered as the sum of both parts, specific and general. Further, Margaret Stevens showed that not all training can be so conveniently dichotomized, and distinguished transferable skills that are of value to some but not all firms. (The omission from this book of Stevens's influential 1994 Oxford Economic Papers article, "A Theoretical Model of On-the-Job Training with Imperfect Competition," is a serious lacuna.) Hence, under certain macro-economic circumstances, the incentive to train low-wage workers grows and, as Ahlstrand et al. relate, can be further increased by subsidies. In short, the real world is more complex than the world in Becker's model, and low-wage workers indeed receive general training in some cases. Becker may be right in the pure case; but at the application level, other factors—supply and demand for labor, the inability to separate general and specific training, skill levels, and government subsidies—all confound the situation, making such studies as this one invaluable.

At the end of the case studies section the authors write that the seven organizations are learning important lessons that can help others. They group the lessons into two types: organizational lessons (relating to leadership and commitment) and policy lessons (relating to government intervention). But it is hard to find these lessons in the text. The main failing, in this respect, is a want of documentation. The reader familiar with business school case studies will look in vain for the usual amount and types of data.

The book concludes with several suggestions to measure and account for investments in human capital, but does not address the problem of the non-captive assets, that is, workers. Further, the authors' public policy recommendations center around reducing the costs of training via consortia and subsidization of training for portable skills (English, computer fluency, customer service, and so on), all to increase the firm's incentives. However, the nation already has a substantial investment in systems to deliver most of this general education to the target population; the difficulty is getting workers to take the initiative to obtain such education. What the target or channel of the subsidy should be-the worker or the firm-and under what conditions, are questions not addressed by these authors. The advice to firms seems to be to find a subsidy; to policy-makers, to find a way to

subsidize general education at the employer level. The question of which is more economically efficient or provides the greater welfare (or both)—subsidies at the organization level or at the worker level—is not mentioned, much less analyzed.

In summary, Ahlstrand and her coauthors provide a well-organized introduction to the practice of work force development in the late 1990s in the United States. Its chief merits are the authors' persuasive anecdotal evidence for making models of worker training more complete and the attention they draw to the issue of training subsidies. Its chief problems lie in the data selected (which are probably biased), a lacuna in the authors' review of the prior literature, and the incompleteness of the policy suggestions.

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Job Training Policy in the United States. Edited by Christopher J. O'Leary, Robert A. Straits, and Stephen A. Wandner. Kalamazoo, Mich.: W. E. Upjohn Institute for Employment Research, 2004. 332 pp. ISBN 0-88099-307-3, \$50.00 (cloth); 0-88099-306-5, \$22.00 (paper).

The impetus for this book was apparently the initiation in most states in 2001 of the Workforce Investment Act of 1998. WIA replaced the Job Training Partnership Act of 1982 (JTPA), which had replaced the Comprehensive Employment and Training Act of 1973 (CETA), which, in turn, had replaced the Manpower Training and Development Act of 1962 (MDTA). This book reviews and analyzes the earlier acts, and also presents contextual comparisons with the public training policies of other nations and with employer-provided training. Chapters 2-8 are based on papers originally presented at a 2002 conference; Chapters 1 and 9, by the editors, provide an introduction, guidance, and conclusions. A primary objective of the work appears to be provision of historical background for consideration of the objectives and initial experience of WIA.

One frequently repeated historical misconception should be noted early, even though it does not appear to have had major impact on

the conclusions. The editors state early in Chapter 1 that MDTA "was marketed to the American public as an antipoverty program." That supposition is repeated by other chapter authors a number of times. Actually, MDTA was introduced in 1962 as a program to re-train and reemploy what would later be called displaced or dislocated workers who, it was supposed, had lost their jobs primarily because of technological change, at the time characterized as "automation." Out-of-school youth in related circumstances were also included. Then, following the design and implementation of the "war on poverty" in 1964, administrative guidelines were issued in 1966 requiring that 65% of MDTA trainees thereafter be drawn from "disadvantaged groups." The other 35% of the training slots were to be used to alleviate Vietnam-related "labor shortages." Thereafter, MDTA and its successors encompassed what would become in JTPA three separate and quite different training programs for youth, economically disadvantaged adults, and displaced workers. WIA continues that tradition by designating separate youth and dislocated worker programs while adding an open eligibility adult program but specifying that the competitively disadvantaged should have priority within it when funds are scarce, which they always are.

Aside from that one common misconception, the chapter authors are obviously deeply knowledgeable concerning training policy in general and their chosen topics in particular. In Chapter 2, Burt Barnow and Jeffrey Smith evaluate the incentive-oriented performance management system incorporated in WIA in historical context. They identify substantial incentives for "gaming" and "cream skimming" and propose design changes to alleviate those problems. Chris King in Chapter 3 adds other publicly financed training programs to the discussion, including, among others, the Job Corps, welfare-related Temporary Assistance for Needy Families (TANF), foreign trade-oriented Trade Adjustment Assistance (TAA), vocational education, and vocational rehabilitation. He cites and explores a number of evaluations of these programs, drawing from them a number of recommendations to apply to WIA. He cites particularly WIA's "work first" bias and advocates a purposeful coordination of work experience and skill training, noting the essentiality of formal career development both now and into the future.

Ronald D'Amico and Jeffrey Salzman (Chapter 4) focus on WIA's broadening of eligibility to all non-dislocated adults, examining administrative records and interviews with work force