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## Low-Skilled Jobs: The Reality behind the Popular Perceptions

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# 1

## Low-Skilled Jobs

### The Reality behind the Popular Perceptions

*My first job, I was 17 years old. I start[ed] working as a nurse's assistant in a hospital. Under my care I had 12 patients. Their lives were in my hands.*

—A low-wage worker

Individuals that work full time spend about 20 percent of their year—and nearly one-third of their waking hours—at work. Individuals have some control over this time, in that they can invest in skills that help shape their work life. Hate working in an office? Build construction skills. Want to help people? Build social interaction skills.

Unfortunately, investing in the skills necessary to get your job of choice is not foolproof, as the market for skills is governed by the laws of supply and demand. These economic forces shape an individual's work life by determining employment probabilities, wages, and potential for career progression.

Most individuals toiling in the labor market focus heavily on the outcomes of labor demand and supply forces. They see their wages as being too low, leaving them without the ability to achieve the life to which they aspire. While virtually all workers voice such complaints, workers in jobs requiring relatively few skills have special concerns, for their wages frequently will not keep their family out of poverty. Perhaps because full-time work may not afford a middle-class lifestyle for workers in low-skilled jobs, questions arise as to whether or not demand and supply forces are fair. How fair is it that some workers must face a life of struggle as they precariously balance full-time work, home responsibilities, and subsistence-level economic needs (DeParle 2004; Munger 2002)?

This book tells the story of the low-skilled jobs available to workers with little formal education or work experience. In the process of telling the story, we debunk several popular perceptions about how the labor

market for workers in low-skilled jobs operates. Frequently, this labor market is portrayed as one in which an excess supply of job seekers competes for relatively few jobs (Newman 1999), and in which employers maintain unrealistic employment criteria even when faced with labor shortages (Jasinowski 2001). Because employers (supposedly) can easily find workers, low-skilled jobs are thought to turn into low-wage, dead-end positions.

When we surveyed employers and asked them about their low-skilled positions, they provided a dramatically different description of the labor market and led us to very different conclusions about its operation. Most importantly, employers told us that the labor market for workers in low-skilled jobs is a market for skills. Specifically, they made the following points:

**Low-skilled jobs require skills.** Low-skilled jobs are not the same as no-skilled jobs, they said. Most jobs require English, math, problem-solving, and communication skills, the so-called new basic skills. More than three-fourths of low-skilled jobs require oral and written comprehension of English, more than half require oral and written expression and deductive reasoning, and at least half require math, reading comprehension, active listening, writing, and speaking. Workers in low-skilled jobs are expected to act appropriately at work and to perceive cues from others correctly. Many low-skilled jobs also require physical abilities and mechanical skills. In fact, low-skilled jobs require physical and mechanical skills at higher levels than other jobs.

**Shortages of appropriately skilled workers in low-skilled jobs exist, even when labor markets are slack.** Close to 60 percent of the firms in the local labor market in this study had difficulty—one-fourth of them had extreme difficulty—finding qualified workers for low-skilled jobs when unemployment rates exceeded 7.0 percent.

**Skills are rewarded in the labor market for workers in low-skilled jobs.** Firms increase wages in low-skilled jobs that require skills the firms have difficulty obtaining. Specifically, low-skilled jobs requiring skills with a high relative demand in the local labor market (i.e., skills in short supply) carry increased occupational wages.

**Low-skilled jobs offer promotional opportunities.** Over 90 percent of entry-level, low-skilled jobs have promotional opportunities. Firms structure promotional opportunities for workers in the entry-level, low-skilled job by requiring workers to expand their abilities to encompass the skill sets used in the job above entry level. The modal title of the position above entry level is lead, supervisor, or manager. Even though entry-level jobs require English and problem-solving skills, jobs above entry-level require higher-level skills in each of these areas.

**Hiring requirements in low-skilled jobs are relaxed in tight labor markets.** Firms match recruiting and screening methods to the skills needed in the low-skilled job. As labor markets loosen, firms use less extensive recruiting methods—as might be expected with greater numbers of applicants—but adopt more intensive screening methods. The increased screening during loose labor markets suggests that firms sift through the greater number of applicants in order to uncover workers with the skill sets needed in the job.

## **WHAT ARE LOW-SKILLED JOBS?**

We define low-skilled jobs as those requiring workers to have no more than a high school education and no more than one year of work experience. We posit that such jobs are low-skilled by virtue of their limited entrance requirements. Indeed, when we asked firms about education and work requirements for such jobs, about 25 percent stated that there were no educational requirements, and just over 40 percent required no work experience. Only about 30 percent of the positions required that the worker speak, understand, and read English “extremely well.”

We characterize low-skilled jobs using both national and local databases.<sup>1</sup> One clear characterization that emerges from the data is that low-skilled jobs are concentrated in a few industries and occupations (Table 1.1). Under the Industry category, the service sector houses nearly 40 percent of low-skilled jobs (and about 37 percent of all jobs). Services, retail trade, and manufacturing together house 75 percent of the low-skilled jobs but only 68 percent of all jobs nationwide. Services

**Table 1.1 Industrial and Occupational Distribution of Low-Skilled Jobs**

	All jobs	Low-skilled jobs
Industry		
Services	36.7	39.8
Education and medical	16.4	14.2
Business services	10.6	11.0
Other services	9.8	14.6
Retail trade	16.6	22.0
Manufacturing	14.7	13.2
Wholesale trade	4.0	6.5
Finance, insurance, and real estate	6.5	5.8
Public administration	4.4	5.2
Transportation, communication, public utilities	7.2	4.1
Construction	7.0	2.7
Agriculture/mining	2.8	0.8
Occupation		
Office and administrative support	7.3	41.3
Production	14.5	11.1
Food preparation and serving	2.1	9.8
Sales and related	2.7	8.5
Building and grounds cleaning/maintenance	1.2	7.6
Transportation and material moving	6.8	7.1
Personal care and service	4.3	2.8
Installation, maintenance, and repair	6.9	2.1
Education, training, and library	7.5	1.9
Protective service	2.6	1.7
Construction and extraction	7.5	1.2
Health-care support	1.9	1.1
Health-care practitioner/technical	6.0	0.6
Business and financial	3.6	0.5
Farming, fishing, and forestry	1.7	0.5
Computer and mathematical	2.1	0.4
Community and social services	1.8	0.4
Art, design, entertainment, sports, and media	4.8	0.4
Management	3.9	0.3
Architecture and engineering	4.5	0.1
Military	0.0	0.1

**Table 1.1 (continued)**

	All jobs	Low-skilled jobs
Life, physical, and social science	5.1	0.0
Legal	1.2	0.0
<i>N</i>	—	2,052

NOTE: Numbers represent the percentage in each category. *N* varies slightly with item-specific missing data. Data on the distribution of occupations are establishment data and are based on the number of occupations, not employment, within a firm, as is consistent with the BALS data.

SOURCE: Bay Area Longitudinal Surveys (BALS) Phone Survey (HIRE 2006) Bureau of Labor Statistics (2002a); U.S. Census Bureau (2003a).

(other than business services and education and medical services), trade (both retail and wholesale), and public administration all contain a disproportionately large number of low-skilled jobs.

Under the Occupation category, six types of jobs—office and administrative support, production, food preparation and serving, sales, building and grounds maintenance, and transportation and material moving—account for 84.5 percent of low-skilled jobs in the San Francisco Bay Area (results not shown) and 75.5 percent of low-skilled jobs nationwide, but only 34.6 percent of all positions nationwide. Office and administrative support account for over 40 percent of low-skilled positions but under 8 percent of all positions nationwide. Food preparation/serving and sales jobs each make up a little less than 10 percent of low-skilled positions but a little more than 2 percent of all positions nationwide.

Low-skilled jobs require relatively fewer skills than other jobs in many areas, which may explain their low educational and work experience requirements. Indeed, when we compare low-skilled jobs to other jobs in the U.S. economy, we see that the knowledge, skill, and ability requirements in low-skilled jobs are modest (Table 1.2). Low-skilled jobs have lower requirements in 21 of the 33 measures of knowledge, 27 of the 35 measures of skills, and 15 of the 51 measures of abilities.<sup>2</sup> The relatively lower requirements in low-skilled jobs all fall into areas that would be classified as new basic skills (academic, problem-solving, and communication skills).

**Table 1.2 Knowledge, Skills, and Abilities Used in Low-Skilled Jobs**

	All jobs	Low-skilled jobs
Knowledge		
Mechanical	52.0	60.0
Mathematics	74.1**	59.3
Skills		
Operation and control	66.6**	74.8
Equipment selection	78.7	71.9
Mathematics	80.0**	67.4
Reading comprehension	87.1**	66.7
Monitoring	83.4**	60.7
Active listening	75.9**	59.3
Writing	70.4**	57.0
Operation monitoring	50.3	53.3
Quality control analysis	70.7**	52.6
Equipment maintenance	40.6**	51.9
Speaking	71.2**	48.9
Low-skilled tasks		
Interact to accomplish a task		90.8
Exhibit appropriate behavior at work		85.3
Perceive cues from others		81.5
Read written instructions, safety warnings, labels, etc.		78.3
Write simple sentences, short notes, and simple memos		77.6
Fill out forms, record data, time		74.1
Read manuals, computer printouts, contracts, and agreements		73.8
Identify work-related problems		70.3
Prioritize tasks		68.8
Read forms, memos, and letters		67.6
Deal with customers		64.6
Use telephone systems		63.6
Problem-solve collaboratively		63.3
Gather information		62.6
Identify potential solutions to problems		52.9

**Table 1.2 (continued)**

	All jobs	Low-skilled jobs
<b>Abilities</b>		
Near vision	97.6**	91.1
Information ordering	94.1	89.6
Manual dexterity	69.6**	84.4
Problem sensitivity	88.9**	81.5
Wrist/finger speed	69.4**	80.7
Written comprehension	86.7**	76.3
Oral comprehension	81.9	75.6
Extent of flexibility	53.9**	74.8
Arm/hand steadiness	63.3**	74.1
Static strength	49.1**	74.1
Control precision	59.9**	70.4
Multilimb coordination	53.0**	70.4
Number facility	72.0	69.6
Trunk strength	56.5**	68.9
Finger dexterity	64.4	67.4
Selective attention	69.0	66.7
Oral expression	74.4**	61.5
Visualization	65.2	57.0
Written expression	68.7**	54.8
Deductive reasoning	82.3**	54.8
Time sharing	56.9	52.6
Perceptual speed	52.2	51.9
Reaction time	36.6**	51.9
Speed of limb movement	32.9**	51.1
Stamina	25.8**	51.1

NOTE: Information is only listed for skills required by at least half of the low-skilled jobs, defined as Job Zone 1 jobs. Data on knowledge, skills, and abilities (KSA) are from the O\*NET database at [www.onetcenter.org](http://www.onetcenter.org). A listing of all KSA in O\*NET is available from the author. Numbers for knowledge, skills, and abilities represent the percentage of occupations that report that that particular knowledge, skill, or ability is important in the job. Importance is defined as a 3 or above on a 5-point scale in which 1 = not important and 5 = extremely important. \*\* indicates that significant ( $p \leq 0.05$ ) differences exist between Job Zone 1 and all jobs, as determined by a *t*-test. Numbers for low-skilled tasks are from BALS data, described in Chapter 2, with information reported only for those tasks used in 50 percent or more of the BALS jobs. Numbers represent the percentage of jobs that report using the skill. Blank = not applicable.

SOURCE: Occupational Information Network (O\*NET) Resource Center (USDOL 2006); Bay Area Longitudinal Surveys (BALS) data (HIRE 2006).

Despite the relatively low educational and work experience requirements of low-skilled jobs, workers must use a relatively large number of skills on the job (Table 1.2). Most notably, physical and mechanical skills are required at higher levels in low-skilled jobs than in other jobs. Sixty percent of low-skilled jobs require mechanical knowledge, about 75 percent require operation and control skills, and over 80 percent require manual dexterity and wrist or finger speed. Physical abilities include manual dexterity, wrist/finger speed, extent of flexibility, arm/hand steadiness, static strength, control precision, multilimb coordination, trunk strength, reaction time, speed of limb movement, and stamina.<sup>3</sup> Mechanical knowledge and skills include quality control analysis, operation and control, and equipment maintenance.

Most low-skilled jobs require workers to possess the new basics of academics (English and math), communication, and problem-solving. Communication skills are the most used: over 90 percent of low-skilled jobs require workers to interact with coworkers to accomplish a task, over 80 percent require workers to act appropriately at work and to perceive cues from others correctly, and over 60 percent require workers to deal with customers or work in teams. Academic skills also are heavily used in low-skilled jobs: over three-fourths require oral and written comprehension of English, including such skills as reading written instructions, safety warnings, labels, invoices, work orders, logs, or journals. Low-skilled workers are also required to write simple sentences, to fill out forms and logs, and to read manuals, computer printouts, contracts, agreements, forms, memos, and letters. Nearly 70 percent of the positions require workers to add and subtract. Over half of low-skilled jobs require oral and written expression. Workers in low-skilled positions are also expected to problem-solve: over 54 percent of the positions require deductive reasoning, and most of the jobs require workers to problem-solve, identify work-related problems, prioritize tasks, deal with customers, work in teams, or gather information.

## **WHO FILLS LOW-SKILLED POSITIONS?**

Workers in low-skilled positions are often thought to be at the bottom of the workplace totem pole. They fill the positions that many of us

held as youths or that we relegate to others for execution. Two distinct groups generally hold low-skilled jobs: youth and the economically disadvantaged. Youth, who by definition have little education or work experience, constitute as many as half of the workers in low-skilled jobs. Some youth are transitory participants in the low-skilled labor market, occupying those positions only until they complete their education or gain work skills on the job and advance beyond the entry-level, low-skilled positions. The other group, the economically disadvantaged, have a truncated education and intermittent work experience, and they frequently struggle in low-skilled employment throughout much of their life. For this group, low-skilled jobs are a way of life.

These two groups approach the labor market with vastly different expectations. Youth, especially youth that do not continue their education past high school, frequently flounder between jobs as they attempt to match their budding interests and skills with the appropriate job (Osterman 1980). In some cases, short-term youth joblessness (Becker and Hills 1980, 1983) and initial employment in minimum wage jobs (Carrington and Fallick 2001) eventually yield to long-term opportunities for advancement. In other cases, floundering creates long-term unemployment and harms career development because of a lack of work experience during the years of career formation, reducing subsequent wages (D'Amico and Maxwell 1994; Ellwood 1982; Lynch 1989; Meyer and Wise 1982). Youth that, for whatever reason, never fully integrate into the labor market and do not continue their education past high school can become mired in low-skilled jobs and enter the realm of the economically disadvantaged.

Both national and local databases make it easy to paint a statistical portrait of workers that potentially hold low-skilled jobs.<sup>4</sup> In 2000, about 44 percent of the U.S. population aged 25–64 could be considered to be in the labor market for low-skilled jobs, because these people had a high school education or less (U.S. Census Bureau 2003c). An additional 30 percent had some college, but, because these people did not have a college degree, they may have found themselves in low-skilled jobs. Individuals with only a high school education were disproportionately African American or from households in which English was not spoken (Table 1.3), and those disproportions increased in the older age groupings. In 1979, about 69 percent of a sample of youth aged 14–22 with a high school education or less were white, and about 78 percent

**Table 1.3 Demographics and Cohort Aging of Workers in Low-Skilled Jobs (% of population)**

	U.S. population in 2000 (Age 25–64)	High school education or less			
		Age 14–22 in 1979	Age 18–26 in 1983	Age 28–36 in 1993	Age 35–43 in 2000
<b>Race</b>					
White	76.3	69.3	68.0	60.9	60.6
Black	11.6	25.1	26.0	32.3	32.9
Other	12.1	5.6	6.0	6.8	6.5
<i>N</i>	1,472,037	12,610	8,545	5,281	4,512
<b>Foreign language at home at age 14</b>					
Yes	18.1	22.0	22.2	24.9	24.2
No	81.9	78.0	77.8	75.1	75.8
<i>N</i>	1,472,037	12,681	8,593	5,316	4,541

NOTE: 2000 U.S. population data are from the (weighted) 1 percent sample of the Public Use Microdata Samples (PUMS). Statistics in columns 2 through 5 are taken from the 1979 National Longitudinal Surveys and represent the percentage of the population in each category.

SOURCE: U.S. Census Bureau (2003c); Bureau of Labor Statistics (2002b).

spoke English in the home as an adolescent. Twenty-one years later, only 60.6 percent of members of the same group were white and 75.8 percent were from English-speaking families. This suggests that whites and individuals from English-speaking households have a greater tendency to continue their education beyond high school and, perhaps, move from low-skilled jobs at a more rapid rate than nonwhites and individuals from non-English-speaking households.

Individuals with only a high school education and little work experience—characteristics that roughly correspond to our definition of low-skilled job requirements—are more likely than individuals with more than a high school education and extensive work experience to have low wages and household income and to face labor market barriers (Table 1.4). Low-skilled individuals have hourly wages that are about half those of high-skilled individuals; such individuals are one-third as likely to receive tips or bonuses, and are four times as likely to live in a household with an income of less than \$20,000.

The labor market challenges facing low-skilled individuals could prevent their becoming full participants in the labor market (Table 1.4). Potential challenges include youth (45 percent of low-skilled individuals are under 30, compared to only 20 percent of high-skilled individuals), greater child care responsibilities (over 80 percent of low-skilled individuals have children under 18), and less access to reliable transportation (low-skilled individuals are less likely to have a driver's license, insurance, regular access to a car, or own a car; and are more likely to use public transportation, walk, or use a friend or neighbor's car for their primary mode of transportation). Low-skilled individuals may be more likely to have health problems that inhibit them from working, as fewer are covered by health insurance and more of them have (or had) a substance abuse problem or a physical disability.

## **THE ECONOMIC ENVIRONMENT FACING WORKERS IN LOW-SKILLED POSITIONS**

Throughout most of the twentieth century, the wage structure in the United States became more compressed (Goldin and Margo 1992). Although education levels were generally rising, a strong demand for

**Table 1.4 Income and Labor Market Challenges for Workers with Low, Medium, and High Skill (% of population)**

	Total	Low skill	Medium skill	High skill
<b>Income</b>				
<b>Labor market</b>				
Hourly rate of pay (\$)	18.18	11.64	15.76**	20.78**
Tips or bonuses	27.1	22.6	18.9	33.2**
<b>Household income</b>				
Less than \$20,000	16.1	31.9	17.4**	7.1**
\$20,000–\$49,999	33.8	23.7	37.7**	29.0
\$50,000–\$74,999	19.5	15.6	17.4	25.3**
\$75,000–\$99,999	11.2	6.7	12.6**	15.2**
\$100,000–\$249,999	7.4	2.2	4.9	13.4**
\$250,000–\$499,999	3.0	0.0	2.8**	5.2**
\$500,000 or greater	0.4	0.0	0.4	0.7
Don't know	8.5	20.0	6.9**	4.1**
<b>Labor market challenges</b>				
<b>Age</b>				
18–25	16.3	31.9	23.0	7.9**
26–30	11.0	14.9	10.7	12.9
31–45	39.2	38.3	44.8	47.3
46–55	15.4	10.6	14.3	22.6**
56–64	7.7	1.4	4.0	8.6**
65 or older	10.3	2.8	3.2	0.7
<b>Children</b>				
Have children (under 18)	64.4	81.3	73.0	65.6**
Have children living in household	61.6	79.4	70.2**	61.6**
If yes, number of children	1.4	2.0	1.5**	1.3**
Taking care of children last week	40.1	56.7	42.1**	41.6**
Total number of children	1.5	2.2	1.7**	1.5**
<b>Transportation</b>				
Have valid driver's license	77.5	47.5	76.6**	93.5**
Have regular access to car	83.9	59.6	83.7**	96.4**
If yes, have car insurance	94.3	86.6	93.8**	97.0**
<b>Typical mode of transportation</b>				
Own car	79.2	50.4	78.6**	92.4**
Public	16.6	37.6	16.3**	7.6**
Walk	13.1	27.7	11.9**	6.5**
Friend or relative's car	6.7	14.9	5.6**	3.6**

**Table 1.4 (continued)**

	Total	Low skill	Medium skill	High skill
Medical				
Respondent covered by health insurance	81.7	62.9	76.6**	91.0**
Medical problem prevents employment	9.0	12.1	9.2	7.2
Mental health issues/depression	8.2	11.4	6.4	8.2
Substance abuse	6.6	11.3	5.6	5.0**
Physical abuse	6.8	10.6	6.0	5.7
Physical disability	7.8	12.3	8.3	5.7**
<i>N</i>	766	141	252	279

NOTE: Numbers represent the percentage of the population in each category. Total includes retired individuals. “Low skill” applies to individuals with only a high school education and no more than one year of work experience. “Medium skill” applies to individuals either having only a high school education *or* no more than one year of work experience. “High skill” applies to individuals with more than a high school education *and* more than one year of work experience. \*\* indicates a statistically significant ( $p \leq 0.05$ ) difference, compared to low skill, as determined by a *t*-test.

SOURCE: Bay Area Longitudinal Surveys (BALS) Household Survey (HIRE 2006).

unskilled labor supported wages at the bottom end of the earnings distribution. Sometime during the 1970s this trend reversed, and by the late 1980s the wage dispersion was back to what it was in the 1950s. Workers at the bottom of the distribution began losing ground. Between 1963 and 1989, real average weekly wages for the least skilled workers declined by about five percent, while wages for the most skilled rose by about 40 percent (Juhn, Murphy, and Pierce 1993).<sup>5</sup>

The reasons for the increasing wage inequality are both varied and integrated; nonetheless, all agree that the economic changes underlying the growing gap have been great. Product market shifts from manufacturing to services (Murphy and Welch 1993) and the adding of skills to production and clerical jobs—traditional sources of employment for low-skilled workers (Cappelli 1993)—favored the more skilled workers in the labor market (Katz and Murphy 1992). These economic changes moved workers’ jobs away from routine cognitive and manual tasks and toward nonroutine analytic and interactive tasks (Autor, Katz, and Krueger 1998; Autor, Levy, and Murnane 2003), which increased the

demand for skills in our economy. As a consequence, skills became increasingly important in determining wages (Murnane, Willett, and Levy 1995), wage differentials (Teulings 1995), employment (Pryor and Schaffer 1999), and wage inequality (Juhn, Murphy, and Pierce 1993); and labor force participation declined among the less skilled (Juhn 1992). Declines in unionization (Freeman 1993) and in school quality (Card and Krueger 1992a), increases in competition (Revenge 1992) and in the use of technology (Autor, Katz, and Krueger 1998), and changes in federal policies (Sawicky 1999) also contributed to the shrinking economic opportunities for the low-skilled. As a result, individuals with below-average skills often remain unemployed or part of the working poor (Handel 2003), and they face increased spells and durations of nonemployment and job instability (Farber 1999) and higher job turnover (Holzer and LaLonde 2000) than more-skilled individuals.

The increased demand for skills also explains the deteriorating labor market for less-educated individuals (Autor, Katz, and Krueger 1998; Murnane, Willett, and Levy 1995), as the less-educated enter the labor market with few skills needed in the workplace (Card and Lemieux 2001). As a result, hiring has moved away from the less-educated and toward the more-educated (Murphy and Welch 1993), and the wage premium for college graduates has increased (Katz and Murphy 1992), which has decreased earnings (Levy and Murnane 1992) and employment (Murphy and Topel 1997; Juhn, Murphy, and Pierce 1993) among less-educated workers. Downturns in the business cycle have exacerbated the plight of less-skilled workers (Hoynes 2000), as college-educated or highly skilled individuals take jobs normally filled by high school-educated or lesser-skilled individuals (Devereux 2002).

## **THE ARGUMENT FOR SKILLS**

These trends present a powerful argument for building skills in individuals with low levels of education to enhance their employment opportunities and wages. But which skills should be built? In a review of five studies on workforce readiness, the National Center for Research on Evaluation, Standards, and Student Testing identified three major categories of basic skills needed by lesser-skilled individuals in jobs:

academic skills, higher order thinking skills (problem-solving), and interpersonal and teamwork (communication) skills (O’Neil, Allred, and Baker 1997).<sup>6</sup> These basic skills—academic, problem-solving, and communication skills—frequently serve as a foundation for vocational skills used in the workplace. In fact, policies and programs designed to make individuals workforce-ready (e.g., the Workforce Investment Act, Welfare-to-Work, School-to-Work) begin by building these basic skills and, if the individual is still not employed, continue training to provide more specific workplace skills.

Research also supports the need for building a strong foundation in these basic skills. Academic skills increase employment (Johnson and Corcoran 2003) and job stability (Holzer and LaLonde 2000) for low-wage workers and determine their wages (Murnane, Willett, and Levy 1995), most probably because employers of low-wage workers require these skills. Over half of the employers in the Multi-City Study of Urban Inequality required daily reading of at least a paragraph, about half required the use of computers and arithmetic, and nearly half required writing—all academic skills. These same employers also value basic communication skills, particularly in retail firms (Moss and Tilly 2001). Specific workplace skills, which are often acquired on the job, were required by under half of the low-wage Multi-City employers (Holzer 1996). The only specific workplace skill required by at least half of the employers was computers (Autor, Katz, and Krueger 1998; Bartel and Lichtenberg 1987), which some consider to be the fifth component of the new basic skills (Murnane and Levy 1996).

## **POLICY SOLUTIONS**

Suggestions abound as to what policies might be implemented to ensure access to Horatio Alger-type success for individuals, and many of the policy proposals are grounded in a philosophy of how the economy best functions. Free market advocates favor no policy interventions, believing that market-produced incentives will lead individuals to invest in the skills that improve their economic opportunities. A more collectivist approach, one frequently taken by unions and grassroots community organizations, favors policies that limit market-produced

incentives by mandating outcomes. Public service employment, restrictions on immigration and trade to limit the supply of workers, and policies to raise wages (e.g., minimum and living wages or wage supports) and employer-funded benefits may be considered examples. A collectivist philosophy underlies many of the publicly funded safety nets and programs that provide support to low-income individuals as they gain necessary labor market skills. Support can be economic (e.g., income supplements), social (child care, gang prevention), or psychological (drug abuse counseling).

Arguably, most policies fall somewhere between the free market and the collectivist perspective by proposing modest interventions in a market-driven economy. Such policies use incentives or capacity building so that either firms or individuals become fully engaged participants in a relatively free market economy. Some such interventionist policies focus on the supply side of the labor market and build human capital. Most prominent among such efforts are two types: 1) public education—an individual's "first chance" for building skills using public dollars—and 2) publicly provided training programs—a "second chance" for individuals that fail to get the requisite skills through education.

Other interventionist policies focus on the demand side of the labor market and stimulate employers' demand for labor. The general tenet of labor demand policies is that jobs are in short supply. Even when unemployment is low, many groups—those with less education, racial minorities, and residents in high unemployment areas—have difficulty finding a job. In this vein, policies that stimulate the economy and expand the number of jobs, while still monitoring levels of inflation, benefit everyone, including groups that face employment difficulties. "A rising tide lifts all boats" aptly describes the philosophy underlying this approach.

Of course, few programs fit neatly into only one of these classifications—in part because policy goals are often multipurposed and overlapping. Still, the categorization provides a useful way to structure discussions about policies designed to facilitate more efficient and equitable labor market outcomes for workers in low-skilled jobs.

## FIRST CHANCE: BUILDING SKILLS IN PUBLIC SCHOOLS

Providing public school students with the knowledge and skills needed in the labor market was at the heart of the School-to-Work Opportunities Act (STWOA) of 1994, which was designed to address the employment problems of youth leaving high school, whether as graduates or dropouts. Concern about the basic skills of our youth began at least a decade earlier, when *A Nation at Risk* took schools to task for their mediocre performance in building students' academic skills (National Commission on Excellence in Education 1983). The continued decline in student performance after the tempest caused by *A Nation at Risk* prompted educators to launch the Back-to-Basics programs of the 1980s, and the continued employment problems of the largely forgotten half of youth that do not graduate from college led to a new vision for secondary education: integrate academic and workplace skills into the curriculum to motivate learning and increase skills in American youth. Two pieces of federal legislation addressed this integration. The Carl D. Perkins Vocational and Technical Education Act of 1998 (Perkins III) integrated academic skills into traditional vocational education, and STWOA integrated workplace skill-building into academic programs.

Both pieces of legislation sought to ease youths' transition from school to work by increasing their academic and workplace skills. If school-to-work programs could build both the academic and the workplace skills needed in the local labor market, the half of youth not graduating from college could transition into well-paying, stable careers (Bernhardt et al. 2001; Halperin 1998). Programs in European secondary schools have had apparent success at easing youth's transition into the labor market by instilling in students job skills that connect with local employers' needs (Vickers 1995). This suggests that a successful school-to-work program could increase employability among youth if it developed skills needed by local employers.

The success of school-to-work programs rests on the assumption that building skills that are in demand in the local labor market will increase employment and wages for those youth whose formal education ends with high school. Research has shown modest employment and wage gains for program participants (Kemple 2001), and yet the school-to-work legislation was not reauthorized. What went wrong?

One possibility was that STWOA did not hold schools accountable for poor performance and that educational decision-making moved away from states and communities, which had the best knowledge of student needs. In 2001, No Child Left Behind shifted federal funds toward increasing the accountability of schools to produce results, giving more freedom to states and communities in using federal education funds, rewarding proven educational methods, and providing more choices for parents. Gone was STWOA's emphasis of linking skill-building in schools to the needs of the local labor market.

Educational policies that change the nature of public education and its incentives can have far-reaching effects. In Fall 2003, public schools served about 85.7 percent of the nation's students, including about 48 million elementary and secondary students (Snyder, Tan, and Hoffman 2004). The predominance of enrollment in public schools means that federal policies that alter the educational environment have an impact on the entirety of the nation's education, public and private.

## **SECOND CHANCE: OUT-OF-SCHOOL PROGRAMS**

Arguably, one of the policies most often targeted at building labor market skills is that of publicly funded employment and training programs. (LaLonde [1995] provides a history of such programs; D'Amico [2005] provides an assessment.) If public expenditures on employment and training programs increase skills through program participation or improved labor market information and employment matches, such investments can prove beneficial to all involved. Participants gain either productive skills or information that leads to employment and increased earnings. Government comes out ahead, too, because participants reduce their dependence on social welfare benefits and increase their tax payments through their increased earnings. And employers gain productive workers.

Current attempts to build such a second-chance system are grounded in the 1998 Workforce Investment Act (WIA). WIA folded earlier training dollars into a universal system of employment and training services for all youth, unemployed persons, and incumbent workers by mandating the development of One-Stop Career Centers in every

community. The goal of One-Stops is to provide high-quality job training, employment, labor market information, and income maintenance services using WIA dollars to fund employment and training activities as well as activities connecting participants to other job- and education-related services. Critical to WIA funding is the discretionary ability of local areas to tailor training dollars to the specific needs of local businesses and potential workers. Most WIA training dollars, like the Temporary Aid to Needy Families (TANF) training dollars discussed below, are for short-term (six months or less) training.

WIA's second-chance programs provide a relatively high volume of services. WIA's One Stop services served about eight million individuals from January 1 to March 31, 2005, and served an additional 300,000 young people in its programs for youth during that time (USDOL 2005). About 7.8 million individuals accessed WIA's Employment Services during the first three months of 2005, and about 300,000 dislocated workers and 387,000 adults in total participated in work activities or received job training.

## **DEMAND SIDE**

Debate exists about how well macroeconomic stimulants increase employment rates, wages, and occupational upgrading for the low-skilled. Some believe that policies to reduce capital gain taxes in order to spur business investment and growth, along with policies to cut personal tax in order to increase take-home pay and demand, benefit primarily the middle- and upper-tiered earners (Danziger and Gottschalk 1986). Still, targeted labor demand policies, in which stimulants are structured to increase employment and earnings for low-income workers (e.g., the Earned Income Tax Credit), can disproportionately benefit low-wage workers (Bartik 2001).

Some advocates of demand-side policies find fault with the payments made to low-wage workers and propose a living wage that would elevate workers' pay enough to allow them to rise out of poverty, despite the potential of such measures to reduce employment opportunities for these workers (Fairris and Reich [2005] and other articles in the same issue of *Industrial Relations*). Other advocates have somewhat more

collectivist goals and argue that more direct interventions in a firm's employment practices are needed. They propose wage subsidies, profit-sharing, public employment, and workplace governance actions such as antidiscrimination restrictions to increase employment of low-skilled individuals, presumably without shifting employment from one group to another or stimulating inflation (Freeman and Gottschalk 1998). Program advocates of demand-side policies often argue that such policies are most effective when combined with support services that encourage job retention and build economic and psychological self-sufficiency (Kazis and Miller 2001). However, most targeted labor demand policies have been experimental at best and have not seen widespread implementation (Bartik 2001).

## **SAFETY NETS**

The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 represented the most radical reform of general income support to low-income families since the expansion of such programs in the 1930s. PRWORA fundamentally changed the nature of welfare funding, placed limits on the amount of time welfare could be received, and created work requirements for recipients receiving TANF.<sup>7</sup>

These legislative changes reflected a philosophical shift in view toward low-income (which are frequently low-skilled) individuals. No longer were they entitled to a lifetime safety net should their labor market efforts bring low earnings. Instead they could receive temporary assistance while striving to gain employment at higher-paying jobs.<sup>8</sup> To help them achieve economic self-sufficiency through labor market earnings, the government requires most TANF recipients to participate in work activities.<sup>9</sup> No more than 20 percent of recipients can participate in vocational training (generally defined as longer-term training of more than six months in duration) for the work activity. TANF programs are viewed as successful at moving individuals into the labor market but as not always successful at placing individuals in jobs with wages leading to economic self-sufficiency (Hamilton et al. 2001).

## SUMMARY

Economic outcomes for workers with relatively few skills have worsened in the past few decades as the demand for skills in the labor market has increased. In response to these changes, policies increasingly have emphasized skill-building and employability within a local labor market as a way to improve the labor market outcomes of low-skilled individuals. Data presented in this chapter suggest that this emphasis is warranted. So-called low-skilled jobs are not no-skilled jobs. Workers in low-skilled jobs are required to possess a wide variety of skills for those jobs' successful execution. Although low-skilled jobs require relatively fewer skills than other jobs, the preponderance of data presented in this chapter suggests that low-skilled jobs require a fair number of skills. Low-skilled jobs require workers to use new basic skills (English, math, problem-solving, and communication) and require them to behave appropriately and to correctly perceive cues from others. And low-skilled jobs require physical and mechanical skills at higher levels than other jobs.

Given the centrality of skills in accomplishing even low-skilled jobs, it is somewhat surprising that research has not put skills at the focal point in describing the labor market for workers in low-skilled jobs. Although research has linked the general increase in demand for skilled labor to economic outcomes for workers with high skills (Cawley et al. 2000; Blackburn and Neumark 1993), it has not made the link for workers in low-skilled positions, in part because data limitations have precluded such analyses.

This study shifts the focus toward skills when studying the labor market for workers in low-skilled jobs. We use information from a single California labor market—the San Francisco Bay Area—to highlight the knowledge and skills that employers require in low-skilled jobs and those that individuals supply. By showing the centrality of skills in low-skilled jobs, we show how firms structure recruiting, hiring, compensation, and promotion opportunities in entry-level, low-skilled jobs. In other words, we show how (and why) the demand for skills in low-skilled jobs structures the work life for workers in such jobs.

## Notes

1. We use the U.S. Department of Labor's (USDOL) Occupational Information Network (O\*NET) database (USDOL 2006) to describe the knowledges, skills, and attitudes needed to perform a wide variety of jobs throughout the economy. We use the Bay Area Longitudinal Surveys (BALS), detailed in Chapter 2, to describe specific tasks of low-skilled jobs.
2. Table 1.2 does not present the complete list of O\*NET's knowledges, skills, and abilities. It presents only those that are used in 50 percent or more of Job Zone 1 jobs.
3. Because Table 1.2 lists only knowledges, skills, and abilities required in 50 percent or more of low-skilled jobs, some physical and mechanical skills are left out. Among the physical abilities not listed are dynamic strength, spatial orientation, dynamic flexibility, response orientation, explosive strength, and overall body coordination.
4. We use the Census Public Use Microdata Sample [PUMS] (U.S. Census Bureau 2003c) to describe a cross-section of the population aged 25–64 in 2000 with no more than a high school education; we use the National Longitudinal Surveys youth sample [NLSY79] (BLS 2002b) to describe how the composition of individuals with no more than a high school degree changes as it ages; and we use the Bay Area Longitudinal Surveys [BALS] (HIRE 2006), discussed in Chapter 2, to describe the characteristics of and challenges facing low-skilled individuals as compared to individuals with higher levels of skills.
5. The growing gap between economic outcomes for the haves and the have-nots is impervious to the definition of have-nots. "Have-nots" can be defined as individuals with low levels of education (Blackburn, Bloom, and Freeman 1990), individuals with low skills (Autor, Levy, and Murnane 2003), children in poverty (Iceland et al. 2001), or members of racial or ethnic minorities (Bound and Holzer 1993). Definitions of economic outcomes also seem not to matter. Earnings (Levy and Murnane 1992), employment (Murphy and Topel 1997; Juhn 1992), wealth (Levy and Michel 1991), and income (Levy 1987) eroded for the have-nots, while the wage premium for education for high-ability workers (Cawley et al. 2000; Blackburn and Neumark 1993) and inequality (Karoly 1993) increased.
6. A fourth category exists in the framework that is not skill-based: personal characteristics and attitudes.
7. Funding changed from income support to families with children (Aid to Families with Dependent Children, or AFDC)—including separate programs for employment and training (Job Opportunity and Basic Skills, or JOBS) and assistance (Emergency Assistance, or EA)—to money from block grants to states for a single, capped entitlement.
8. Recipients under the old legislation remained eligible for benefits as long as they met program eligibility rules. Under PRWORA, federally funded welfare assistance exists only for five cumulative years (60 months). States can exempt up to

- 20 percent of their caseload from this time limit by using state funds to provide assistance to families beyond the federal time limit.
9. Prior to PRWORA, states were required to offer basic work activities to recipients (e.g., basic and secondary education; English as a Second Language programs; job skills training; and job development, placement, and readiness) and at least two of the less basic activities (e.g., job search, on-the-job training, work supplements, or community work experience) as a part of the old training program (JOBS).