With welfare reform now a reality, policy makers and employers must grapple with the employment impediments that keep much of the welfare population out of the work force. The foremost problem is illiteracy. One-third of welfare recipients are functionally illiterate; another third possesses only marginally better reading skills, still unable to perform many basic job-related tasks. Entry-level jobs represent their only employment opportunities. Lacking formal education and real work experience, they cannot expect middle management jobs or salaries based on need rather than qualifications. With welfare reform, many are proposing higher mandated wages or so-called "living wages" of up to $9 per hour or more. These proposals ignore the basic tenet of the employment process: employees are hired based on their skills, not their needs. Despite overwhelming evidence of the effects of literacy and work experience on wages and massive spending on primary, secondary, and remedial education, literacy rates continue to decline. The contradiction between the ideals of welfare reform and the realities of high minimum wages should force policymakers to address certain questions: what will be the long-term effects of mandating wages that illiterate people will never command. How can welfare recipients find work if wages that equate to their skill levels are outlawed? And how can untrained and illiterate individuals gain on-the-job experience if they are priced out of the entry-level job market? (Appendixes include definitions and 42 endnotes.) (YLB)
From

WELFARE to WORK

The Transition of an Illiterate Population

Employment Policies Institute
February 1997
Executive Summary

Welfare reform is now a reality. Yet the challenge of moving millions from welfare to work will be as difficult as the reforms are popular. Policy makers and entry-level employers must now grapple with the employment impediments which are keeping much of the welfare population out of the work force. And foremost among these problems is illiteracy.

One-third of welfare recipients are functionally illiterate. They struggle to perform the simplest of reading, writing and quantitative tasks — e.g., completing a job application or bank deposit form. Another third of this population possesses only marginally better reading skills, still unable to perform many basic job-related tasks.

For these individuals, entry-level jobs represent their only employment opportunities. Lacking both formal education and real work experience, they cannot expect to walk into middle-management jobs. Just as important, they cannot expect salaries based on need rather than qualifications.

Yet with the onset of welfare reform, this is just what many are proposing—higher mandated wages or so-called “living wages” of up to $9 an hour or more. What is ignored by these proposals is the basic tenet of the employment process: that employees are hired based on their skills, not their needs.

An undeniable correlation exists between literacy and economic success. Consider the statistics:

- More than 32 percent of Americans who report no income are functionally illiterate.
- Approximately two-thirds of Americans who read at the lowest of five literacy levels report that their reading skills are “not at all limiting” when it comes to job opportunities.
- Illiteracy rates have risen dramatically since World War II, with a significant increase during the last decade alone.

In America, wages are a function of literacy and skills — not government mandates. This paper analyzes this skill-wage equation, concluding that America’s staggering illiteracy rate is not only a major cause of income discrepancies, but a major impediment in the crusade to move millions from welfare to work.
Introduction

Unanswered in the crusade to move millions of people from welfare to work is this fundamental question: Will employers hire applicants who cannot read?

For many employers, the answer is no. With the imposition of high minimum wages and mandated benefits, they cannot afford to hire workers who are inexperienced, uneducated, and illiterate — workers who require extensive training and supervision.

There are roughly 4 million welfare-dependent adults in America. More than one-third of them test at the lowest national literacy standard, struggling to read a safety label or fill out the simplest job application. An additional third read below the level defined by the National Educational Goals Panel as essential in today’s economy. Yet under the 1996 welfare reform law, much of this population will be expected to find jobs. The effect, predict economists and education experts alike, could be a desperate segment of our society stranded without government benefits or employment.

Compounding the challenge of moving millions of illiterate welfare recipients into the work force are the recent minimum wage hikes which have been passed at the federal and state level. Just as welfare reform is demanding millions of new entry-level jobs, higher employment costs are inhibiting their creation. And while the employment opportunities that are created demand more skills by the year, the welfare population continues to offer fewer.

During World War II, fewer than half of one percent of Army recruits drafted from the general population read below a fourth-grade level. Today, the proportion of the population that cannot read at this level is more than ten times as high, having increased significantly among young adults even during the last decade. Among the welfare population, the average 17-to-21-year-old reads at a sixth-grade level, and overall, more than half have not completed high school. Regarding skills, demand does not equal supply in the entry-level job market. How, then, do we suddenly transport millions of welfare recipients into the work force?

There are many reasons why securing employment will be difficult for current welfare clients. Jobs are being created in the suburbs, while many welfare recipients reside in cities and rural areas. Child care is a problem. Nothing explains the mismatch between entry-level employment supply and demand more, however, than America’s skills deficit.

Skills Limitations of the Entry-Level Work Force

According to studies sponsored by the U.S. Department of Education, 21 to 23 percent of the population is functionally illiterate. Lacking the most basic skills demanded by employers, these individuals have trouble reading the dosage on an aspirin bottle, filling out a simple form, or completing a bank deposit slip. An even more staggering 32 to 36 percent of Americans with no income source and 34 to 44 percent of welfare recipients struggle to perform most basic reading, writing and quantitative tasks.

The vast majority of the welfare population simply lacks the skills demanded by today’s employers. According to a study by the Educational Testing Service, "levels of literacy and degrees of success in the labor market are... closely linked. This is true in the general population and it is true among those on welfare." Researchers have determined that a full two-thirds of Aid to Families with Dependent Children (AFDC) recipients enrolled in the Job Opportunities and Basic Skills Training Program (JOBS) require substantial "skill upgrades" before being eligible for any job. And these are the welfare recipients who
are making a concerted effort to secure training and employment.

It is not that entry-level jobs require a college degree or computer literacy. But they do require a certain commitment to show up on time, a willingness to learn, and some basic skills—often those obtained through the discipline of earning a high school diploma. Those who fail to graduate from high school inherently limit their income potential. According to a study conducted for the Employment Policies Institute by University of Chicago economist Derek Neal, more than 44 percent of working men and 64 percent of working women who dropped out of high school are low-wage workers (defined by Neal as those making less than $6.25 per hour).7

And what is most significant about low-wage earners, says Neal, is their failure to master the basic skills of reading, writing, and arithmetic. A remarkable 70 percent of low-wage men score below average on basic skills tests. Neal’s evidence points to the conclusion that a large percentage of the low-wage work force would actually be denied admission to the Armed Forces based on their failure to master basic skills. And data from the National Adult Literacy Survey show that the skill base of the welfare population is considerably lower than that of even this low-wage population.8

**Today’s Jobs Require Skills**

Jobs in today’s economy—even at the entry level—require traditionally academic skills. “Workplace literacy, which integrates the three R’s through analytical thinking capacity, is crucial to the success of workers in the workplace,” argues a U.S. Department of Labor study.9 The study’s data demonstrate that literacy proficiency helps to predict an individual’s future earnings and his or her general success in the labor market. For instance, as a separate study shows, those who test at the highest literacy levels have median incomes 100 to 300 percent higher than those at the lowest level.10 (Individuals in the lowest literacy level reported median weekly earnings of about $230 to $244, compared to median weekly earnings of $615 to $681 for those at the highest level.)

Literacy is, similarly, a determinant of one’s professional status. Reading skills are generally measured on a 500-point scale. American professionals have reading and math skills around the 320-point level; those in labor and service occupations fall around 270.11 Those without jobs and on welfare score far lower. (For a full discussion of literacy levels and definitions, see Appendix I.)

While approximately 95 percent of Americans can read beyond a fourth-grade level, almost half of the population falls into the two (of five) lowest literacy levels, possessing reading skills that the National Educational Goals Panel has defined as well below those needed to compete in the modern economy.12 This does not mean that they are unemployable—a large percentage of them have jobs—but that their potential for professional and income growth is severely limited.

This scenario is also in stark contrast to the beginning of the post-World War II era when, with little skill or educational background, a private could return from military service and pick up a shovel or join an assembly line. With few skills, he could still earn a middle-class living. Today, functional illiteracy is a far bigger roadblock to employment.

As stated previously, during World War II, fewer than half of one percent of Army recruits drafted from the general population read below a fourth-grade reading level. Today, the proportion of the general population that cannot read at this level is more than ten times as high, according to the National Adult Literacy Survey (NALS). Among those on food stamps, 44 percent have difficulty with the simplest quantitative tasks such as making change, and 38
percent struggle to read the most basic of documents.\(^1\) (Unfortunately, the available data on literacy rates in the 1940's and 1950's are not nearly as thorough as the modern data. Although the dearth of available data makes it difficult to put an exact figure on the extent to which literacy rates have declined, the downward trend is clear.) In the debate over jobs and wages, even a mention of these abysmal statistics is rare. Instead, the minimum wage is regularly increased — a policy which research has shown to be detrimental to national skills development, as mandated wage rates inevitably shift the composition of the labor force away from the interests of the least skilled (and especially illiterate) individuals.

Following a minimum wage hike, as research by David Neumark of Michigan State University has shown, less-skilled teens are displaced from the work force by their more highly-skilled counterparts — often at the expense of the latter's educational attainment. Neumark projects, for instance, that the 1996/1997 federal increase in the minimum wage from $4.25 to $5.15 an hour will increase by 20 percent the number of youths aged 16 to 19 who are neither in school nor at work. At the same time, the probability that youths will be employed while in school declines by 4 percent, decreasing the number of teens working while in school by 8 to 15 percent.\(^1\)

The problem identified by Neumark is dramatic not only because it implies that a minimum wage hike reduces the high school graduation rate while limiting job opportunities for the least skilled, but because government statistics show that most adults fail to actively improve their educational base later in life. In fact, few illiterate adults even admit to having a problem. A very small percentage of Americans who test at the poorest literacy levels perceive themselves as poor readers. When asked (verbally) to describe their own reading ability, 53 to 58 percent of those at the lowest levels of five levels and 91 to 92 percent of those at the second lowest level assess their own reading ability as "good" or "excellent."\(^1\) Approximately two-thirds of those at level one and almost 90 percent of those at level two say that their reading skills are "not at all limiting" when it comes to job opportunities.\(^1\) Thus, refusing to admit their deficiencies, these individuals remain stranded in economic and occupational circles which correspond closely to their educational attainment.

## Reading, Income & Economic Status

The fact that 17.8 percent of employed Americans test at the lowest document reading level\(^1\) (functional illiteracy) demonstrates that some jobs can indeed be performed with few or no literacy skills. But recent concern over stagnant wages is testimony to the inability of those with deficient skills to move beyond the entry level. A full 65.1 percent of those out of the labor force (those who do not have a job and are not looking for one) and 70.0 percent of the unemployed fall into the lowest two (of five) literacy levels. Only 5.3 percent of the unemployed fall into the highest two literacy levels.\(^1\)

Moreover, among those who are employed, quality of employment and income level is a distinct factor of literacy. Employed workers with little to marginal reading ability earn only a third that of the most literate Americans.\(^1\) More than 32 percent of individuals who have no income are functionally illiterate, compared to only 1.2 percent of those at the highest income level.\(^1\) Of those with the best document-literacy skills (filling out forms, etc.), 33.5 percent are in the highest two income quintiles, compared to only 3.6 percent of those at the lowest literacy level.\(^1\)

According to the Self-Assessed Skill Needs and Job Performance study, "results suggest that basic skills associated with academic learning are especially important to perfor-
formance in the workplace. "Thus, illiterate individuals must not only struggle through life's most basic tasks, but are often unemployable. They are 17 times more likely to be on food stamps, and six times more likely to be living in poverty than the nation's best readers."

Study after study documents the link between literacy proficiency and salary. Those in top earning jobs possess the highest literacy skills; those on welfare possess the least. Consider the following conclusion from one study about the depth of the welfare population's literacy deficit:

"It is important for policymakers to recognize the diversity within the welfare population. One-fourth have skills to succeed in the labor market. They need help with other impediments to employment (such as child care or medical benefits) or simply incentives (or requirements) to move forward. Another quarter could probably proceed to job training or engage in a combination of basic skills upgrade and job training as a way of improving their employment options. The remainder, about a half of the total, present real challenges in terms of how to help them overcome basic skills deficiencies — deficiencies that arise as a result of failures in the school system, unrecognized learning disabilities, and other personal and familial difficulties that pose a serious barrier to training and employment. These challenges cannot be expected to be overcome through the typical, short-term, adult literacy program."

The federal government has been concerned with illiteracy since at least 1929, when President Herbert Hoover created an Advisory Committee on National Illiteracy. Today, there are more than six dozen federal literacy programs. Government literacy programs have been created by the Adult Education Act (AEA), the Job Training Partnership Act (JTPA), the Employment Service/Unemployment Insurance Programs (ES/UI), the Immigrant Refugee and Control Act, the Stewart McKinney Homeless Assistance Act and the Crime Control Act of 1990. The government spends hundreds of millions of dollars each year on adult literacy programs. Yet between 1990 and 1992, the Department of Education estimates that all the federal adult literacy programs combined served only 3.6 million individuals, less than 10 percent of the illiterate population. Meanwhile, be-
tween 1985 and 1992 alone, the literacy skills of persons 21 to 25 years old dropped 11 to 14 points on a 500-point scale.30

Policy Implications

Nearly one-quarter of the population is functionally illiterate, and an additional 25 percent have insufficient reading and writing skills to meet the demands of today’s job market. These deficiency rates are even more staggering among the unemployed and those out of the work force. For many of these illiterate individuals, entry-level jobs have become their educator of last resort. Those who possess basic skills — or even a willingness to learn them — are given an opportunity to move up the ladder into jobs where their newly-acquired skills can be adequately compensated. These workers experience wage growth by expanding their experience and skill base. For those who want a first job, especially those leaving welfare, entry-level employment provides them with the only opportunity to gain skills and experience, something many never obtained through schooling or remedial federal programs. For those who cannot read, have few job-related skills, and are not willing to learn, the level of fixed, mandated employment costs inevitably determines whether or not they are given access to the work force or left to depend on the state.

And here lies the irony behind recent federal and state policies. Just as policy makers are mandating work by welfare recipients, the minimum wage has been hiked at the federal level, with several states and localities either considering or already implementing much larger increases. Some contend that these higher wages are an important piece of the welfare-to-work puzzle — that wage rates should be mandated at a level to equal or surpass welfare benefits. However, research shows that not only do the two policies make a poor fit, they work against each other. High minimum wages inhibit the welfare-to-work transition.

Evidence reported in The Wall Street Journal points to similar conclusions.32 Just weeks after the 1996 federal minimum wage increase, the Journal reported that companies were tightening their labor-cost belts. The half-dollar increase prompted employers to start “carefully scrutinizing who they hire,” even doing “assessment profiles” to make sure they were not “wasting the extra 50-cents on unreliable help.” Others were “slashing hours and spreading the same amount of work around to fewer people.”

Even supporters of the recent federal minimum wage increase, such as Boston University economist Kevin Lang, worry about the effects the wage has on the composition of the work force.33 “Minimum wage increases induce a shift towards teenagers and students and away from non-students and adults,” says Lang. His research shows that “the competition from higher quality workers... makes low-skill workers worse off.” The phenomenon will only increase as localities begin to implement so-called “living wages” of six or seven dollars an hour or more.

This contradiction between the ideals of welfare reform and the realities of high minimum wages should force policy makers to address certain questions: What will be the long-term effects of mandating wages that illiterate people will never command? How can welfare recipients find work if wages that equate to their skill levels are outlawed? And how can untrained and illiterate individuals gain on-the-job experience if they are priced out of the entry-level job market?

While reducing welfare dependency and increasing wages are worthy economic and political goals, they cannot simultaneously be achieved merely through mandating the results. Rather, these issues surrounding wage and welfare policy must be examined within the context of America’s illiteracy crisis.
Appendix I

Definitions

There is no universally agreed upon definition of literacy. However, one proposed definition from the National Literacy Act of 1991 provides a good context for this paper: "an individual's ability to read, write, and speak in English and compute and solve problems at a level of proficiency necessary to function on the job and in society, to achieve one's goals and to develop one's knowledge and potential."34

This definition relating reading ability to the daily tasks of life is the basis for modern literacy studies. The two most prominent of these studies, from which many of the statistics in this paper are taken, are the National Adult Literacy Survey (NALS),35 prepared by the Educational Testing Service in September 1993, and Literacy, Economy and Society, prepared by the Organisation for Economic Cooperation and Development (OECD) in 1995 (an international literacy comparison). Both were sponsored by the U.S. Department of Education and reach similar conclusions and statistics.

The two studies divide literacy into three categories: prose, document and quantitative. Prose literacy is defined as "the knowledge and skills associated with locating and using information from texts such as editorials, newspaper articles, stories, poems and the like." Document literacy refers to an individual's ability to interpret and use items such as "tables, charts, graphs, maps [and] indexes." Quantitative literacy is determined by ability to perform "different arithmetic operations, either alone or sequentially, using information embedded in both prose and document materials."36 The following descriptions outline America's deficiencies in these areas, according to the OECD study. A few of these numbers differ slightly from the NALS data, as, although the two surveys reach similar conclusions, they were conducted separately. Both sets of numbers are referenced in the preceding paper.

Prose:

- 20.7 percent of Americans perform at the lowest level of prose, meaning they are frequently unable to "rea[d] or locate one piece of information in the text that is identical or synonymous to the information given in the directive." Those at level one are often unable to read directions on a children's aspirin bottle.37

An additional 25.9 percent of Americans achieved level 2 on prose questions, meaning they had difficulty completing tasks requiring them to locate one or more pieces of information in a text "where several distractors may be present, or low-level inferences may be required." These individuals can read simple directions, but many are often not able to make lower level inferences from texts.38

Document:

- 23.7 percent of Americans scored at level one of document literacy, unable to perform tasks that asked the reader to locate a piece of information based on a literal match. For instance, readers would have to pick out a certain piece of information from a simple chart. Other questions asked the "reader" to enter personal information on a form (that contained very little distracting information). Most of this group would not be able to fill out a simple job application.39

An additional 25.9 percent of Americans fall into level 2. Level 2 tasks ask the reader to match a piece of information, when some distracting information is present, or to make a low-level inference. One sample question asks readers to determine from a chart which year resulted in more injuries from fireworks in The Netherlands. An irrelevant but distracting chart is placed "next door" on the page.40

Quantitative:

- 21 percent of Americans scored at level 1 on quantitative literacy. Questions asked them to perform "a single, relatively
simple operation (usually addition) for which the numbers are already entered onto the given document and the operation is stipulated, or the numbers are provided and the operation does not require the reader to borrow."41

An additional 25.3 percent of Americans are at level 2, meaning they often could not complete tasks that "required readers to perform a single arithmetic operation (frequently addition or subtraction) using numbers that are easily located in the text or document. Here, the operation to be performed could be easily inferred from the wording of the question or the format of the material (for example, a bank deposit form or an order form)."42

Endnotes


2 Individuals are defined as functionally illiterate when they test at the lowest of five levels for prose reading, document reading or quantitative reading skills. Individuals are tested separately in each of these three areas. The percentages in this document are given in ranges, because the literacy data differ slightly in each reading category. For a broader definition of these reading levels, see Appendix I.

3 Literacy, Economy and Society: Results of the First International Literacy Survey (Paris and Canada: Organisation for Economic Co-operation and Development (OECD) and Statistics Canada, 1995).

4 Barton.

5 Ibid.


7 Derek Neal, "Who are the 'Low-Wage' Workers?" (Washington, D.C.: The Employment Policies Institute, July 1996).

8 Barton.


13 Barton.


15 Literacy, Economy and Society.

16 Ibid.

17 Ibid.

18 Ibid.

19 Cohen.

20 Literacy, Economy and Society (Comparing prose literacy levels. Functional illiteracy equals level 1.)

21 Literacy, Economy and Society.

22 Peter Cappelli and Nikolai Rogovsky, Self-Assessed Skill Needs and Job Performance, National Center on the Educational Quality of the Work Force, National Center on Adult Literacy of the University of Pennsylvania, January 1995.

23 Cohen.

24 Ibid.
Among ES/UI participants, those who reported earnings between $3.86 and $4.99 "attain[ed] average proficiencies between 265 and 275" on the literacy scale "while those who report[ed] earnings of $10.00 or more per hour demonstrate proficiencies at about the 315 level.”


Kirsch, Beyond the School Doors.

Cohen.

Ibid.

Kirsch, Adult Literacy in America.


Cohen, p. 4.

Kirsch, Adult Literacy in America.

U.S. Department of Labor, Research and Evaluation Report Series 93-F (Also see Kirsch, Beyond the School Doors.)

Literacy, Economy and Society.

Ibid.

Ibid.

Ibid.

Ibid.

Ibid.
The Employment Policies Institute is a non-profit research organization dedicated to studying public policy issues surrounding employment growth. In particular, EPI research focuses on issues that affect entry-level employment. Among other issues, EPI research has quantified the impact of new labor costs on job creation, explored the connection between entry-level employment and welfare reform, and analyzed the demographic distribution of mandated benefits. EPI sponsors nonpartisan research which is conducted by independent economists at major universities around the country.
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