



U.S. Department of Education
Office of Career, Technical and Adult Education

Adult Workers with Low Measured Skills: A 2016 Update

In 2013, the Organisation for Economic Co-operation and Development (OECD) released a Survey of Adult Skills that, for the first time, analyzed the literacy, numeracy, and digital problem solving skills of nationally representative samples of adults, ages 16 through 65, from 24 countries.¹ The Survey showed that the United States has a high percentage of low performers in literacy, numeracy, and digital problem solving; the skill levels of U.S. adults have remained stagnant over two decades; and the youngest U.S. cohorts are outperforming older cohorts only slightly, unlike in many other industrialized countries.

In March, the National Center for Education Statistics (NCES), published the U.S. National Supplement, *Skills of the U.S. Unemployed, Young, and Older Adults in Sharper Focus*,² that provides an enriched sample with data collected in 2014 and updated estimates for the United States. This fact sheet uses these new data to provide an updated profile of low-skilled workers in the U.S., updating Chapter 1 of the original [Upskill Initiative report](#).

Who are Americans with Low Measured Skills?

Consistent with the terminology OECD used in the *Time for the U.S. to Reskill?* report,³ the Upskill initiative uses scores below level 2 as the threshold for low levels of proficiency or “low-skilled.” With the enhanced sample and estimates, some of the demographic information available from the Survey is used here to refresh a profile of lower-skilled working age (16 to 65 years old) Americans, their highest level of education attained, in which industries they are employed, and how much they are earning, on average, for the work they do.

Across the total U.S. working age population, ages 16-65, the new data confirm that there is a significant portion of employed adults with low measured skills. Fourteen percent of the employed population have low literacy skills; 23 percent have low numeracy skills, and 62 percent have low digital problem solving skills.

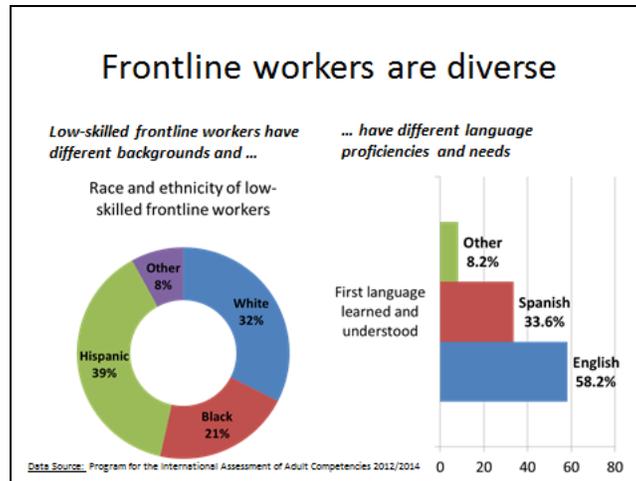
¹ The OECD’s Survey of Adult Skills draws from a rich background questionnaire to measure relationships among respondents’ educational backgrounds, parental educational attainment, work history and skills, occupational attainment, use of information and communications technology, and cognitive skills. It measures these relationships in the domains of literacy, numeracy, and problem solving in technology-rich environments and rates performance in five numbered levels for literacy and numeracy, and in four levels for problem solving. In the United States, a nationally representative sample of 5,000 individuals was surveyed. The National Supplement surveyed an additional 5,000 Americans to allow for deeper insights into skill issues affecting unemployed adults (ages 16–65), young adults (ages 16–34), older adults (ages 66–74), and incarcerated adults (ages 16–74). The data and reports from the incarcerated sample will be released in the summer of 2016.

² Rampey, B.D., Finnegan, R., Goodman, M., Mohadjer, L., Krenzke, T., Hogan, J., and Provasnik, S. (2016). *Skills of U.S. Unemployed, Young, and Older Adults in Sharper Focus: Results From the Program for the International Assessment of Adult Competencies (PIAAC) 2012/2014: First Look* (NCES 2016-039). U.S. Department of Education. Washington, DC: National Center for Education Statistics. <http://nces.ed.gov/pubs2016/2016039.pdf>

³ (OECD, 2013) *Time for the U.S. to Reskill? What the Survey of Adult Skills Says*. http://www.oecd-ilibrary.org/education/time-for-the-u-s-to-reskill_9789264204904-en

Age, Ethnicity, and Gender

Low skills are a challenge faced across the age span. Among low-skilled working adults, thirteen percent are in the youngest cohort measured (ages 16-24), 18 percent are 25-34, 19 percent are 35-44, 28 percent are 45-54, and 21 percent are 55-64. This means that half of the low-skilled working population is under the age of 45.



Low-skilled working Americans are also more likely to be minorities. Thirty-three percent of low-skilled working adults are White, 21 percent are Blacks, 39 percent are Hispanics, and eight percent are other ethnicities. There were also differences in the employment rates, depending on whether these adults were born in the U.S. or abroad: forty percent are foreign-born and 60 percent were born in the U.S.

It should be noted that the cognitive domains of the Survey were administered in English, in order to assess adults' command of literacy, numeracy and digital problem solving in that language. The Background Questionnaire was available to be administered in Spanish if requested. Adults who speak other languages may have stronger skills in those languages than in English. Thirty-three percent of lower-skilled working adults report Spanish as the first language they spoke and understood.

Men make up a larger proportion of the low-skilled working population: 57 percent of the working low-skilled population comprises men while 42 percent comprises women. An overwhelming majority, 77 percent, of lower-skilled working adults are parents.

Educational Attainment and Learning

The enhanced 2016 National Supplement sample and estimates, which uses updated estimates from the American Community Survey, indicate that nearly 4 percent more working age Americans have some college experience and 4 percent fewer have less than a high school diploma compared to the 2013 Survey of Adult Skills report. This adjustment shows up as a slight uptick of the U.S. performance in literacy to being on par with the international average, relative to the initial 2013 report.⁴

The National Supplement provides new estimates of educational attainment for low-skilled adults who are working, reflecting a shift toward greater educational attainment. The new data indicate that 33 percent have less than a high school diploma, 56 percent have at least a high school diploma and may also have a certificate, and 11 percent have at least one college degree.

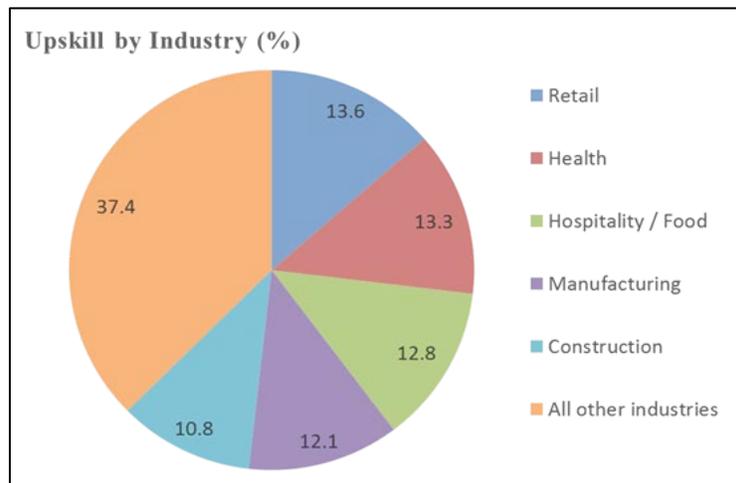
⁴ See Appendix C of the *Skills of U.S. Unemployed, Young, and Older Adults in Sharper Focus* report.

Clearly, formal schooling matters to skill attainment. Four percent of employed adults with at least one college degree have low literacy skills, while 17 percent of those with a high school diploma and nearly 50 percent without a high school diploma have such low skills. Among working adults with low numeracy skills, similar trends are evident: eight percent have a college degree, almost 30 percent have a high school diploma, and 59 percent have attained less than a high school diploma.

Unfortunately, half of all low-skilled workers are not engaged in formal or non-formal learning opportunities. Of the fifty percent who did report participating in education, it was far more likely that their employer paid the costs of non-formal education, 40 percent, than for formal education, 12 percent.

Labor Market Outcomes

Two-thirds of Americans with low literacy skills are employed —totaling 20-23 million adults, a significant population of workers. According to the Survey, these workers tend to be employed in retail and auto mechanic services, health and social work, hospitality and food service, manufacturing, and construction. These five industries account for 62 percent of the low-skilled workforce. Both literacy and numeracy skills pay off for workers, with a strong positive correlation between proficiency and income, but numeracy is even more strongly correlated than literacy. Nearly 60 percent of lower-skilled adults earn incomes in the bottom quintile, or less than \$16,000 a year.



Despite the gains made in the U.S. economy, unemployment and out of work status remain a concern for the low-skilled population. From the total U.S. population, the Survey showed that lower-skilled adults were more likely to be unemployed or out of the labor force than employed. Twenty-four percent of the unemployed population and 26 percent of those out of the labor force (ages 16-65) were low skilled in literacy, compared to 14 percent who were employed. In numeracy, 42 percent of the unemployed population and 40 percent of those out of the labor force were low skilled, compared to 23 percent who were employed.