

## ACT Research and Policy

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### Issue Brief

# Help Wanted: Many Youth Lack Education for Modern Workplace

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Well-educated workers earn large financial premiums in the 21st century economy.

Educational attainment has been stagnant or declined over last decade.

Over the past several decades, the demand for high-skilled labor has grown dramatically. While earnings have traditionally grown with educational attainment, the gaps have become more pronounced in recent years (Autor, 2011; Lemieux, 2006). Well-educated workers have much better labor market outcomes than workers with lower levels of educational attainment. In 2010, 23 percent of high school dropouts age 25 to 29 were unemployed as compared with the unemployment rates of 15 percent for high school diploma graduates (HSDGs) and 6 percent for workers with a bachelor's degree. Weekly earnings also differ substantially with education. HSDGs earn 18 percent more than students who leave high school early. Workers with 4-year degrees earn 60 percent more than HSDGs with no postsecondary training. These earnings gaps increase as workers age, because wage growth is positively related to educational attainment. Among 45 to 49 year old workers, HSDGs earn 27 percent more than dropouts, and workers with 4-year degrees earn 95 percent more than HSDGs. These strong returns to secondary and post-secondary training provide strong incentives for students to complete high school, continue on to college, and earn postsecondary degrees.

In addition to the financial advantages for individual workers, education provides substantial nonpecuniary and societal benefits. Several studies have shown that health behaviors and outcomes are positively related to educational attainment (Cutler & Lleras-Muney, 2010; Oreopoulos & Salvanes, 2011). Education also has positive effects on voting participation, community involvement, and crime (Moretti, 2004). Lochner and Moretti (2004) estimate that a one-percentage point increase in high school completion rate would save about \$1.4 billion per year in reduced cost of crime.

Despite these benefits, educational attainment has been stagnant or declining over the past decade. High school graduation rates have fallen from historic highs in the 1970's, college enrollment rates have leveled off, and college graduation rates are stable or declining.

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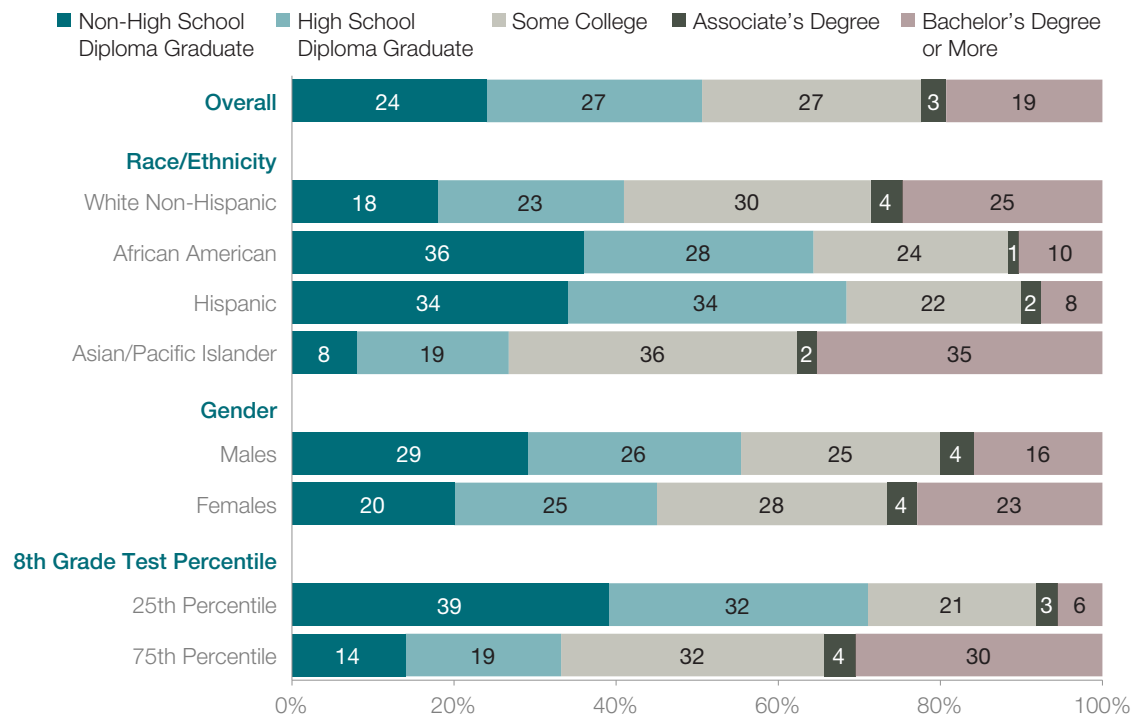
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Low educational attainment will leave many young workers with high unemployment rates, chronically low wages, and low wage growth.

Based on current completion rates, 24 percent of current high school freshmen are unlikely to complete high school and another 27 percent will earn a high school diploma but not pursue postsecondary education (see Figure 1). While 65 percent of HSDGs continue directly on to college, few of these students persist to earn college degrees. This evidence suggests that the influx of new workers entering the labor force will do little to meet growing demand for high-skilled labor. Rather, low educational attainment will leave many young workers with high unemployment rates, chronically low wages, and low wage growth.

**Figure 1. Projected educational attainment for current high school freshmen.**



At-risk minorities, boys, and low-achieving high school freshmen have much worse prospects than other groups.

Educational attainment is much lower for some population groups than for others (see Figure 1), and these gaps have remained largely unchanged over the past decade. African Americans and Hispanics are much less likely to complete high school and earn postsecondary degrees than are Whites and Asian/Pacific Islanders. Females are much more likely to remain in school through high school and college than are males. Educational attainment is strongly related to student achievement levels at the start of high school. High school freshman at the 75th percentile of student achievement are much more likely to complete high school and succeed in college than are students at the 25th percentile. These substantial attainment gaps portend large differences in labor market success for different groups over their careers.

Broad reforms are needed to improve the educational attainment levels of youth and to eliminate (or substantially reduce) the gaps in attainment across population groups. Several recent studies have identified policies that may substantially increase educational attainment levels over the next decade. These studies are based on rigorous empirical analysis that provides strong evidence on how particular policies affect educational outcomes.

- **Boost noncognitive skills.** Heckman, Stixrud, and Urzula (2006) show that early childhood education programs increase children's noncognitive skills (e.g., self-esteem, self-control, persistence, motivation, and locus of control), and these skills play an important role in long-term educational and labor market outcomes. Similarly, Jacob (2002) shows the cognitive skills of adolescents differ little by gender, but high school boys get lower grades, have more behavioral problems, have lower attendance, and lower enjoyment of school than do girls. Conley (2007) argues that high schools should do a better job of addressing behavioral attributes (e.g., study skills, time management, persistence, and ability to work in study groups) that are needed to succeed in college. Finally, a recent program found that individualized student coaching on noncognitive skills like time management, self-advocacy, and study skills improved the college persistence of nontraditional students (Bettinger & Baker, 2011).
- **Improve teacher quality.** A large number of recent studies have found substantial variability in teacher quality in elementary and secondary schools (Aaronson, Barrow, & Sander, 2007; Buddin & Zamarro, 2009; Clotfelter, Ladd, & Vigdor, 2007; Kane & Staiger, 2008; Rivkin, Hanushek, & Kain, 2005). These studies find that some teachers are much more effective than others at improving student achievement. In addition, this evidence suggests that high-quality teachers are broadly dispersed across schools—so teacher effectiveness varies substantially from classroom to classroom both in struggling urban schools *and* in highly-regarded suburban schools. Chetty, Friedman, and Rockoff (2011) show that students assigned to high-quality teachers are more likely to subsequently attend college, attend higher-ranked colleges, earn higher wages, and live in more affluent neighborhoods. This evidence suggests that better screening of new teachers and remediation of low-performing teachers could substantially improve the short- and long-term outcomes of students.
- **Improve access to financial aid information.** A recent study shows that college enrollment rates for low- and medium-income high school students increase when their families receive detailed information on their eligibility for financial aid (Bettinger, Long, Oreopoulos, & Sanbonmatsu, 2009). The research indicated that many students were discouraged from applying to college, because

Broad educational reforms are needed to improve educational attainment and shrink gaps.

#### Promising initiatives:

- Strengthen noncognitive skills for education success
- Improve teacher quality in elementary and secondary school
- Better information on college costs and aid prospects for high school students and their parents

Improved educational attainment would ratchet up career prospects for the next generation of workers.

they assumed that college costs were prohibitive. The researchers developed a simplified form to clarify how much financial aid would be available, and this information encouraged more students to apply for college and subsequently to enroll.

These new initiatives show promise for improving educational outcomes, but further research is needed to identify additional effective measures to increase high school graduation rates, college persistence, and college graduation rates. Improved educational attainment would help meet the demand for a higher-skilled workforce and ratchet up the career prospects for the next generation of workers.

## References

**Note:** This Issue Brief is based on research that is documented in Buddin (2012). The projections in Figure 1 are based on historical data from the National Center for Education Statistics and from ACT's Educational Planning and Assessment System. The labor market measures are based on calculations from the American Community Survey and the Current Population Survey's March Supplement.

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