Learning While Earning:
The New Normal

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Portraits of Working Learners

Working while learning is now the accepted pathway to education and training for both young and mature working learners.

When working with aggregate data, it's easy to lose sight of the voices and experiences of the people being studied. As part of the research for this report, the authors interviewed a number of actual working learners — some of whom were members of the ACT Foundation Working Learner Advisory Council — and utilized their personal experiences and stories to illuminate the report and to develop policy proposals that would satisfy their needs. The following are some of the individuals who helped to provide insight into the lives of today's working learners:

Morgan Lamborn, a young working learner, is enrolled part-time in a Master of Business Administration program at a four-year public doctorate-granting university where she works full-time as an admissions officer.

Hometown: Lake Placid, Fla.

Morgan Lamborn on working learner time constraints:

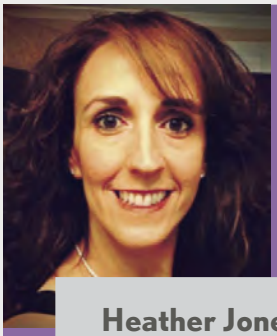
"Time is the biggest challenge. There are never enough hours in the day. So working on my Master's right now is a lot; it's being pulled in 62 directions at once, every single day."

Thierry Pierre-Charles, a young working learner, is enrolled full-time in a Bachelor's degree program at a four-year public doctorate-granting university. His self-designed major is in biomedical science and policy, with a focus on pre-medical studies and scientific studies. He works part-time as a transition specialist assisting people with disabilities.

Hometown: Miramar, Fla.

Thierry Pierre-Charles on working learner isolation:

"I knew that I would end up having to work, because my parents weren't in a position to support me. It kind of impacts you mentally because you really don't have too much social interaction — you know you can't go out and have fun. But the only reason I even kept doing it is because I didn't have anything else to fall back on."



Heather Jones, a mature working learner, is enrolled part-time at a two-year public technical college. She works full-time at the corporate office of a large bank. She is taking classes for self-enrichment and is not enrolled in a degree-granting program. She earned a Bachelor's degree from a four-year private doctorate-granting college 15 years ago.

Hometown: Burbank, Calif.

Heather Jones on working learner needs:

"Orientation days. How great that would be if there was something offered specifically for non-traditional aged students! You know it would be designated a certain name; they would have specific resources, and specific contacts."

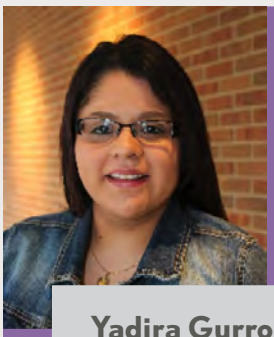
Portraits of Working Learners

Landon Taylor is a young working learner. He is married and has two children and is enrolled full-time in a Bachelor's Degree program at a four-year public non-doctorate-granting university. His major is public relations and advertising. He works part-time during the day for a technology consulting firm as a business development coordinator, and part-time in the evening as a server at a restaurant.

Hometown: Oakland, Calif.

Landon Taylor on the motivations of working learners:

"Society tells you that if you have kids while you're in school, your life is over — you've got to basically give up your dreams. I believe the exact opposite. I think your children should inspire you to do great things. And that's what they've done. I can't wait till when they're older, to be able to tell them everything that we went through to make sure that they had a great life."

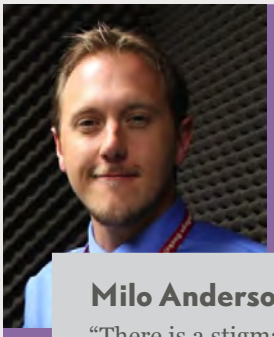


Yadira Gurrola, a young working learner, is enrolled full-time in a Bachelor's degree program at a four-year public college. Her major is social work and she is also pursuing a certification to become a pharmacy technician. She works part-time at a discount retail superstore as a store manager, monitoring cash registers and the service desk, and assisting the pharmacy.

Hometown: Scottsbluff, Neb.

Yadira Gurrolla on working learner perseverance:

"It feels good to know that I can pay for my phone. I can pay for my gas. I can pay for my clothes. I can pay for everything that I need. This is, I guess, in my heart. This is me; this is my story. I know what my next step is. As long as I can get there and keep going on, that's kind of my ambition."



Milo Anderson, a mature working learner, is enrolled part-time in a certificate program at a two-year public technical college. His focus is in business administration. He earned a Bachelor's degree from a four-year public non-doctorate-granting university 10 years ago.

Hometown: Canoga Park, Calif.

Milo Anderson on the stigmas faced by working learners:

"There is a stigma to going back to college. It's sort of frowned upon. I think what I'd like to see, as more of a general change in mindset, is more acceptance of the fact that education is a lifelong process. I'm going back to school and I can see people's expression change, like, 'Oh. So, you're 31 and still not doing anything with your life?' That's the kind of negative mindset I'd like to see shifted."

Summary

For decades, the popular conception of a college student in this country has been the full-time residential financially dependent student who enrolls in a four-year college immediately after graduating from high school.

But that student has not been the norm at U.S. postsecondary institutions for more than 30 years. Such students exist but they are greatly outnumbered by working learners: students who balance learning in college with earning a paycheck.

In the United States today, nearly 14 million people – 8 percent of the total labor force and a consistent 70 percent to 80 percent of college students – are both active in the labor market and formally enrolled in some form of postsecondary education or training.[1] These programs include degree-granting programs, such as Associate's and Bachelor's degree programs, non-degree granting programs, and certification and vocational training programs.

In the 21st century economy, skills have become the most important currency in job markets. Today, workers need the right postsecondary preparation to gain a foothold and prosper in the labor market, employers need highly skilled postsecondary talent in order to remain competitive, and communities need both a highly skilled workforce and a competitive business sector in order to build attractive places to live, work, and study.

In this report, we examine the students who are combining work with ongoing learning. We find that:

- **Going to college and working while doing so is better than going straight to work after high school.** Many people argue that it's better to go to work than to go to college, particularly from the perspective of lost potential wages while in school. Our findings show clearly that students who complete college degrees while working are more likely over time to transition to managerial positions with higher wages than people who go straight into full-time work after high school.

- **Working while attending college hurts disadvantaged students the most.** This is because working learners of lower socioeconomic status are more likely to work full-time and attend under-resourced open-admission community colleges. There is a widespread consensus that working too much while enrolled in a postsecondary program hurts one's chances of completing it. It is not clear, however, whether low completion rates among working learners employed full-time is due to working more, having access to fewer

1 Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau's *American Community Survey* data, 2012-2013.

educational and support services, the relevance of the program to their career, or other barriers associated with socioeconomic status.[2]

- **Working and learning simultaneously has benefits, especially when students work in jobs related to what they study**. Work experience also becomes an asset that working learners carry with them as they enter the full-time job market, accelerating their launch into full-time careers.[3]

- **Most students are working. Students are workers and workers are students.** From 1989 to 2008, between 70 percent and 80 percent of undergraduates were employed. By 2012, that share declined to 62 percent due to the job losses associated with the 2007-2009 recession.[4] Students work whether they are in high school or college; whether they are rich, poor, or somewhere in between; whether they are young and inexperienced or mature and experienced.

- **One-third of working learners are 30 or older.** Mature working learners (ages 30-54) primarily comprise workers who have a postsecondary credential but are upgrading their credentials to keep up with the requirements of their jobs, to earn a promotion, or to retrain for a new career.

- **More people are working full-time while in college.** About 40 percent of undergraduates and 76 percent of graduate students work at least 30 hours a week. About 25 percent of all working learners are simultaneously employed full-time and enrolled in college full-time. Adding to their stress, about 19 percent of all working learners have children.

- **You can't work your way through college anymore.** A generation ago, students commonly saved for tuition by working summer jobs. But the cost of college now makes that impossible. A student working full-time at the federal minimum wage would earn $15,080 annually before taxes. That isn't enough to pay tuition at most colleges, much less room and board and other expenses.

- **Students are working and taking out more loans to pay for college.** The nation has yet to figure out how to pay for this new stage in the transition from youth dependency to adult independence and family

2 Working in high school is bad for student outcomes but outcomes are much more complicated for college students. For those who complete a degree, working while in college can yield many long-run advantages, especially if students work in a field directly related to their course of study.

3 Bailey et al,. *Redesigning America's Community Colleges.* 2015. Working in field is especially relevant for fields of study that have direct ties to occupations such as STEM (science, technology, engineering, and mathematics) and healthcare, or Associate's degrees in applied sciences. Carnevale et al., *Certificates*, 2012, show that working in field adds 37 percent to wages of workers with a postsecondary vocational certificate.

4 See Table 1.

formation. Public funding of postsecondary education at both the state and federal levels is declining. This trend has resulted in the rapid increase in the amount of outstanding student loan debt, from $240 billion in 2003 to $1.2 trillion today.[5]

Policy implications

- **Working learners need stronger ties between the world of work and the world of education.** In spite of the centrality of career goals as the motivation to get a college degree, students are left largely on their own to connect their postsecondary education choices to an increasingly complex set of career options.[6]
- **To improve the connections between work and learning, federal and state policymakers should fund postsecondary education, in part, based on performance measured by labor market outcomes.** Historically, the public has funded postsecondary education and training programs based on enrollment. In this system, regionally-accredited institutions receive public funding in proportion to the size of their student body. However, many states have recently embraced performance-based funding models, under which institutions are awarded for achieving outcomes measured by outcome standards set by policymakers.
- **Policymakers should also invest in competency-based education programs that teach skills with labor market value.** Mature working learners in particular have developed competencies through work that are not recognized by postsecondary education and training institutions because they were not learned in a classroom environment. Competency-based education programs recognize and award credit for prior learning, which allows working learners to learn efficiently and potentially to accelerate their progress through education and training programs.

5 Georgetown University Center on Education and the Workforce analysis of data from the Federal Reserve Bank of New York, 2003-2014.

6 Bailey et al., *Redesigning America's Community Colleges,* 2015.

Summary Table

		Young working learner, 16-29 years old	Mature working learners, 30-54 years old*
	Share	67%	33%
	Sex	56% women	59% women
	Race/ethnicity	Disproportionately white	Disproportionately African-American
	Common occupations	26% food and personal services occupations 6% in managerial occupations	12% food and personal services occupations 17% in managerial occupations
	Common majors	Social sciences, humanities, business, and other applied fields	Healthcare, business, and other applied fields
	Share working full time	40%	76%
	Common degree program	Bachelor's degree	Certificate/Associate's degree
	Institutional sector	Four-year colleges	Community colleges and for-profit colleges
	Share with children	20%	61%
Wages after completing Bachelor's degree	Wages above $42,000 per year	9%	42%
	Between $7,500 and $42,000 per year	58%	46%
	Less than $7,500 per year	33%	12%
Wages while enrolled	Wages above $42,000 per year	10%	8%
	Between $7,500 and $42,000 per year	67%	53%
	Less than $7,500 per year	23%	39%

Source: Georgetown University Center on Education and the Workforce analysis of data from the National Postsecondary Student Aid Review, 2012 and National Longitudinal Study of Adolescent to Adult Health waves 3 and 4, 2001-2009.

* A small share of working learners (3%) is over 55 years old and is generally excluded in the analysis of this report.

** The federal poverty line varies by household size. In 2015, an income of $23,540 represents 200 percent of the federal poverty line for a single individual.

Introduction

The rise in the number of working learners is a natural evolution of our work-based society.

Work always has been, and continues to be, a central component of American culture. Americans work more hours than anyone else in the developed world. Work provides income that is the primary means to access the goods and services necessary for a middle-class standard of living, but it is more than that. The jobs that individuals perform are a central part of their identity.

Work used to be the primary means of financing a college education. In the 1950s, college students represented a small share of the population and many college students financed their tuition by working summer jobs. Since then, going to college has become much more widespread – and much more expensive. The number of college students has increased from 2.4 million in 1949 to 20 million in 2014.[7]

The lockstep march from school to work no longer applies for a growing share of Americans. Many young adults are taking longer to launch their careers: the shift from a high school-centered economy to a postsecondary-centered economy has added a new phase to the lifecycle. In the industrial economy high school was enough. Nowadays one goes nowhere after high school unless he or she gets at least some college.[8] On average, because of the new postsecondary human capital requirements for formal learning and work experience, the age at which young workers reach the median wage has increased from 26 to 30.[9] In other words, the period of transition from youth dependency to adult independence has grown from seven to 11 years.

That kind of career bootstrapping is more visible than ever on campuses. Not only do colleges include growing numbers of students who need work (working learners), but more and more experienced workers who also need college (learning workers). The transition into a career is no longer linear. The system of education for youth leading to informal learning on-the-job has been replaced by an expectation of lifelong learning and the continuous upgrading of skills required to adapt to new workplace technologies and evolving occupational structures.

At the same time, the summer job market has collapsed. In the 1970s, more than half of youth in their late teens were employed in

7 Georgetown University Center on Education and the Workforce analysis of data from the National Center for Education Statistics' *Digest of Education Statistics* tables, 2013.

8 At best, 20 percent of high school educated men have access to middle-class careers with what is left of the old industrial career track. See Carnevale et al., *Career Clusters*, 2011.

9 Carnevale et al., *Failure to Launch*, 2013.

summer jobs; today, only 30 percent are.[10] So the old picture of students working and saving all summer so they can study full-time during the school year is now quite rare.

A persistent question for parents and educators has been whether work harms educational performance or expectations for further education. The general answer has been that working more than 15 to 20 hours per week can harm academic performance and educational aspirations, especially among high school students.[11] But these findings often rely on heavily descriptive data. More nuanced analyses suggest a more complicated picture.

Early work experience forms good habits and helps students make career connections.

The effect of work on students depends on the student and the work. Work helps pay living costs in high school and some share of educational costs after high school. In general, work — even menial work — promotes skills such as time management, communications, and conflict resolution, as well as many other soft skills necessary for success in the workforce. Work can also be a meaningful alternative entry into the adult world, providing an escape into relevance

10 Desilver, "The fading of the teen summer job," 2015.

11 Dundes and Marx, *Balancing Work and Academics in College*, 2006

Internships. Half of graduating college seniors report having worked as interns.

The Economic Policy Institute estimates there are about 2 million interns in the U.S. labor force (1.3 percent of the 155 million workers in the labor force). Internships are tailored mostly to four-year college students while they are enrolled or shortly after they graduate and enter the full-time labor market. Colleges and universities typically award academic credit for internships and frequently match students to internships and provide oversight of the intern-employer relationship. Roughly half of college seniors nationally said they completed an internship while enrolled, suggesting that roughly one million college students are employed as interns.

Internships provide on-the-job training and relevant work experience that prepare future workers for occupations in a particular industry or career field. Interns also acclimate themselves to a professional setting; acquire letters of recommendation for future entry-level jobs and graduate-level programs of study; and form professional networks they can potentially leverage into high-paying jobs later in their careers. Internships also serve as an opportunity to test whether particular career fields are of interest to the interns at minimal cost to themselves or their employers.

Evidence shows that internships pay off in the long run. The starting annual salary for college graduates who completed a paid internship was $52,000, compared to $36,000 for those who completed an unpaid internship and $37,000 for those who did not complete an internship. Furthermore, the share of college graduates who received a job offer was 63

from the abstract grinding rigors of schooling. Work can also be a personal and occupational exploration connecting individual interests, values, and personality with academic fields of study leading to particular careers.[12]

But the effects of work differ by student characteristics both in high school and even more so in college. Low-income students, especially low-income African Americans and Hispanics, tend to experience the more negative effects of working on their educational achievement and educational attainment. This appears to be the result of a lack of counseling, social capital, and other supports that are typically associated with a higher socioeconomic status or more selective colleges.[13]

The effects of work and learning also depend on the nature of the work. A job is more powerful as an educational tool when it provides exploratory learning that supplements or complements a student's field of study. This is crucial in graduate education, where fields of study are most tightly tied to careers. It is more complex at the baccalaureate level, where educational and career exploration is still fresh, especially among younger students with less work experience. A job is most likely to be complementary to academic skills for the 80 percent of baccalaureate majors pursuing career-related majors such as science, technology, engineering, and mathematics (STEM), business, education, and healthcare.[14]

12 Hobson, *Is Work Good for Your Health and Well-Being?*, 2007

13 Carnevale et al., *Separate and Unequal,* 2013

14 Carnevale et al., *The Economic Value of College Majors*, 2015

percent for those who completed a paid internship, compared to 37 percent for those who completed an unpaid internship and 35 percent for those who did not complete an internship.†

The benefits are not so clear, however, when the internships are unpaid. Many students engaged in disciplines such as politics, policy, arts, entertainment, and journalism often participate in unpaid internships as a necessary rite of passage for entry-level workers. However, there are strong allegations that these internships are prone to nepotism and that, because young adults from low-income family backgrounds cannot afford to take unpaid positions, their access to careers in these industries is limited. The Economic Policy Institute has proposed subsidizing unpaid internships for students from low-income families through the Federal Work-Study grant program to address these concerns. The recent public scrutiny of unpaid internships has sufficed, in some cases, to encourage employers to either pay their interns, as the Nation Institute and Atlantic Media did, or to end their internship programs altogether, as in the case of the mass-media company Condé Nast. Under the assumption that internships are mutually beneficial to employers, postsecondary institutions, and interns themselves, these new trends represent a cause for concern. However, recent evidence questioning the value of unpaid internships suggests their decline may not carry a significant negative impact.

† Georgetown University Center on Education and the Workforce analysis of data from the National Association of Colleges and Employers, 2013.

Tying learning content to work experience is more problematic at the Associate's degree level. More than half of Associate's degrees are Associate of Arts (AA) degrees with no obvious relevance to specific occupations or industries. But Associate of Science (AS) or Associate of Applied Science (AAS) degrees, which have a direct tie to occupation or industry, comprise a large share of Associate's degrees. The same is true of the 12 million certificates produced every year. Moreover, substantial shares of programs have direct connections to industry-based certifications and licenses that provide a "workaday" focus for college programs and course clusters.

Young and mature working learners' experiences vary:

- Young working learners are more likely to be enrolled in baccalaureate programs at colleges than mature working learners, who are more likely to be in certificate programs or employer-sponsored training.
- Young and mature working learners enroll in different majors and fields of study. Young working learners are disproportionately enrolled in the humanities and social sciences, while mature working learners are disproportionately enrolled in career-oriented majors, such as healthcare and business.
- Mature working learners have more work experience, possess a clearer concept of their future career goals, and are more likely to enroll in career-oriented majors.

Internships, externships, and work-study programs that connect students to real job experiences as well as professional contacts are the new norm for college-goers. In the hope of gaining a competitive edge and enhancing their résumés, many working learners seek temporary work positions while enrolled. Working learners who complete college degrees while working are more likely to transition to managerial positions over time than workers who have not completed college degrees while working.

This suggests that the marketplace rewards those with higher credentials and increasingly requires additional skills before employees can be promoted. In addition to moving to managerial positions, working learners also have increased mobility as a whole and are more likely to transition to different occupations after they complete their education compared to workers who do not complete degrees while working.

More attention should be paid to the pathways from education to work.

The growing connection between work and learning needs to be a serious subject for policy discussion and a key performance metric in assessing postsecondary outcomes. Ultimately, of course, in a modern republic such as our own, the higher education mission is to empower individuals to live fully in their time. But it's hard for people to live fully in their time if they are living under a bridge. It's hard to be a lifelong learner if one is not also a lifelong earner.

Yet, while the connection between postsecondary education and the economy has moved to the center of the national policy dialogue, and as data systems that connect postsecondary programs with careers become more integrated, our current ability to articulate and build curricula and counseling systems that honor these relationships is woefully inadequate.

Transparency between postsecondary programs and labor markets has become more important because of the growing diversity among postsecondary programs of study, credentials, and modes of delivery that are aligned with an increasingly complex set of career pathways.

- The number of career fields identified by the U.S. Census Bureau increased from 270 to 840 between 1950 and 2010;[15]
- The number of colleges and universities grew from 1,850 to 4,720 between 1950 and 2014;[16] and
- The number of programs of study offered by postsecondary education and training institutions grew from 410 to 2,260 between 1985 and 2010.[17]

In this new environment, programs and curricula matter more and institutions matter less. In economic terms, the relationship between the college a worker attended and the career that person chooses has become weaker and the impact of field of study on career prospects has become stronger. The economic value of postsecondary education and training has less to do with institutional brands and more to do with the growing differences in cost and value among

15 Wyatt and Hecker, *Occupational Changes During the 20th Century*, 2006; BLS, 2015.

16 National Center for Education Statistics, *Digest of Education Statistics*, table 317.10.

17 National Center for Education Statistics, "Integrated Postsecondary Education Data System," n.d.

an expanding array of programs in particular fields of study. Degrees and other postsecondary credentials have multiplied and diversified: from traditional degrees measured in years of seat time; to micro-credentials that take a few months; to boot camps, badges, stackable certificates, noncredit programs, and MOOCs (massive open online courses) that take a few weeks; to test-based industry certifications and licenses based on proven competencies completely removed from traditional classroom training.

The fragmentation in programs and providers reflects a parallel fragmentation in the education and training needs of the modern postsecondary student body.

Four rules are important for understanding the connections between postsecondary programs and careers.

The new relationship between postsecondary programs and the economy comes with new rules that require much more detailed information on the connection between individual postsecondary programs and career pathways:

- ***Rule 1.*** On average, more education yields more pay. Over a career, high school graduates earn $1.3 million; Bachelor's degree holders earn $2.3 million; PhD holders earn $3.3 million; and professional degree holders earn $3.7 million.[18]
- ***Rule 2.*** What a person makes depends on what that person takes. A major in early childhood education pays $3.3 million less over a career than a major in petroleum engineering.
- ***Rule 3.*** Sometimes less education is worth more. A one-year information-technology certificate holder earns up to $72,000 per year compared with $54,000 per year for the average Bachelor's degree holder. Thirty percent of Associate's degree holders make more than the average four-year degree holder.
- ***Rule 4.*** Programs are often the same in name only. Programs and college majors have different values at different institutions depending on the alignment between particular curricula and regional labor market demand, as well as on differences in program quality.

18 Carnevale et al., *The Economic Value of College Majors*, 2015.

The Rise of Working Learners

College enrollment has increased from 2 million students to 20 million students over 60 years.

The growth in the postsecondary student body is partly a function of the growing demand for educated workers and the reality that jobs and the opportunity to earn middle-class wages are increasingly tied to postsecondary credentials. The number of students enrolled in postsecondary institutions increased from 2.4 million in 1949 to 20 million in 2010, from 60 percent to 68 percent of high school graduates.[19] Much of the growth since 1973 can be attributed to rising demand for college graduates in the labor market and the difference in wages that could be earned by college graduates over high school graduates. As the U.S. economy has restructured over the past few decades, the need for skilled workers has accelerated. A comparatively widespread and diverse cross section of American youth and older students has recognized and responded to the market demand for higher skills by enrolling in postsecondary institutions.

Much of the postsecondary enrollment growth witnessed over the past decade is attributable to the rise in enrollment of older students.

As economic change accelerated in the 1980s and 1990s, colleges began to attract an increasing

Employee Tuition Assistance Programs make up an important financial safety net that supports working learners.

Access to a support system that both removes traditional barriers and provides a financial safety net appears to be one of the most significant factors affecting educational and workforce outcomes for working learners. Indeed, an ideal holistic support system for working learners, provided in partnership by a postsecondary institution and a private company to increase postsecondary retention and attainment rates, could include the following components:

- Convenient learning options, such as distance learning or online courses;
- Provision of child care;
- Affordable transportation options;
- Employment partnership agreements;
- Access to healthcare insurance;
- Paid sick, maternity, and paternity leave;
- Financial literacy and wealth-building information and retirement/investment options; and, most importantly,
- Tuition assistance.

19 Georgetown University Center on Education and the Workforce analysis of data from the National Center for Education Statistics' *Digest of Education Statistics*, Tables 302.10 and 303.10, https://nces.ed.gov/programs/digest/.

share of older students as well as the traditional 18- to 24-year-old cohort. In fact, students over the age of 25 accounted for more than 40 percent of the enrollment growth between 2000 and 2011.[20] Today, most undergraduate students – consistently between 70 percent and 80 percent of undergraduates enrolled in U.S. postsecondary institutions for most of the past 25 years — are employed (Table 1). Regardless of student characteristics such as family income, financial dependency, enrollment status, type of institution, age, race, marital status, or other demographic characteristics, the contemporary "average" college student works.

Moreover, the attachment of students to the labor market is anything but marginal. Data from the early 1990s to the present consistently show that students work an average of around 30 hours per week. At least a quarter of all students – and about a fifth of all students who enroll on a full-time basis – are also employed full-time while enrolled.

Working while enrolled in college is not a new phenomenon and does not appear to be a temporary response to cyclical economic factors. Rates of student employment rose steadily during the 1970s and 1980s and have held steady

We identify tuition assistance as being the most important support component because, in the absence of financial support from an external source, such as need-based grants, parental support, or student loans, the majority of workers simply could not afford the cost of tuition and fees for postsecondary enrollment each semester.

Over the past 20 years, businesses have begun to rethink their position on tuition assistance programs (TAPs) for employees. While TAPs may be beneficial for working learners, they also benefit employers. Workers who make full use of tuition assistance may demonstrate productivity above the market level (i.e. companies that offer TAPs hire more productive workers to begin with and reduce costs through decreased employee turnover). Even if the skills and knowledge gained through completion of a degree program ultimately lead to working learner turnover to the benefit of different companies, current employers and firms continue to find TAPs to be worth the investment.

20 National Center for Education Statistics. *Digest of Education Statistics*, 2013, (2015), Chapter 3.

since then (Table 1), irrespective of economic cycles.[21] The U.S. Census Bureau found that 72 percent of students worked in 2011, and one-fifth of all students worked full-time year-round. The number of weeks employed while enrolled varies to some degree. For example, the share of full-time students who work all or most weeks is 87 percent, compared with 97 percent of exclusively part-time students. Eighty-nine percent of dependent students work all or most weeks, compared with 93 percent of independent students.[22]

The share of students working was relatively consistent in the 1990s and 2000s at between 70 percent and 80 percent. The share working full-time was also fairly consistent, at between 30 percent and 40 percent. Both have declined somewhat due to the Great Recession that began in 2007. The decline since 1996 in the proportion of working learners who are employed full-time may mean that the benefits of working while going to college may have topped out as rising college costs make working a less effective financing strategy compared to loans.

Table 1. In the 1990s and 2000s, the share of Americans working while enrolled in postsecondary institutions was consistent until it declined following the recession.

Year	Share working (%)	Average hours worked	Share working full-time (%)	Average student debt (2014$)
1989 - 1990	77	30	40	10,139
1992 - 1993	72	31	34	11,667
1995 - 1996	79	30	36	12,328
2003 - 2004	74	29	33	21,072
2007 - 2008	75	29	32	24,573
2011 - 2012	62*	29	26	18,081

Sources: All data from the National Postsecondary Student Aid Review, various years; National Center for Education Statistics, 1994; Cuccaro-Alamin and Choy, *Postsecondary Financing Strategies,* 1998; Horn and Berktold, *Profiles of Undergraduates in U.S. Postsecondary Education Institutions,* 1998; Horn and Nevill, *Profiles of Undergraduates in U.S. Postsecondary Education Institutions,* 2006; U.S. Department of Education, 2010; U.S. Department of Education, 2014.

* The decline in the percent of working learners in 2011-2012 is most likely due to severe job losses during the Great Recession.

21 The proposition that rising demand is entirely responsible for rising student employment is complicated by demographic supply side factors. For example, the largest gain in employment among students occurred during the 1970s as the baby boomers rushed into the workforce and onto college campuses at the same time, creating a relative surplus of young workers and a large number of college students who needed to work, especially prior to the advent of large increases in federal student loans. (Stern and Nakata, *Paid Employment Among U.S. College Students*, 1991).

22 Horn and Betktold, *Profiles of Undergraduates in U.S. Postsecondary Education Institutions*, 1998.

Working learners are more concerned about enhancing résumés and gaining work experience than paying for tuition.

Students enter the labor market for a variety of reasons.[23] Those reasons include to:

- Provide financial support or pay for education expenses;
- Gain or maintain useful skills and experience;
- Build or maintain a professional network; or
- Complement and reinforce classroom learning.

College students also work because it's part of the culture in which they were raised, because their parents choose not to finance their education wholly, or due to other preferences related to debt, financial independence, or lifestyle.[24]

Regardless of their reasons, to some extent, all working learners share the common experience of simultaneously navigating enrollment in postsecondary education and formal engagement in the labor market.

23 Rising tuition and other educational costs relative to family income and the rise in unmet financial need explain the proliferation of working learners. Students are motivated to work in order to pay tuition costs when they receive federal aid in the form of work-study or when the student and his/her family are unable or unwilling to pay the difference between college costs and unmet financial need. For example, during the 1960s and 1970s, student employment rates grew consistently while family income and public subsidies for college were growing faster than college costs (Stern and Nakata, *Paid Employment Among U.S. College Students*, 1991). The "rising cost of college" thesis also does not account for the fact that employment among part-time students has held steady since at least the 1970s while postsecondary education costs have experienced extraordinary growth. Moreover, the simple explanation that students work to pay for college doesn't account for the complexity of student financing strategies, and the differences among student strategies regarding how they combine borrowing, working, and enrollment. For example, students at two-year institutions are more likely to work without borrowing to pay for their education, and students who enroll full-time are more likely to borrow (Cuccaro-Alamin and Choy, *Postsecondary Financing Strategies*, 1998). However, working is a strategy that students pursue regardless of whether they receive financial aid without having to borrow, or receive aid and still choose to borrow; while intensity of work is less for those who receive aid and do not borrow and the least for those who receive aid and do borrow, wherein, nearly one in five students (19%) who receive aid and borrow still work full-time (Horn and Berktold, *Profile of Undergraduates in U.S. Postsecondary Education Institutions*, 1998).

24 This perspective is somewhat supported by the fact that over 70 percent of dependent students from families with incomes over $90,000 per year work, and about a third of these students worked more than 20 hours per week (King, *Working Their Way Through College*, 2006). Perna et al. argue that older undergraduates grow as a share of total enrollment; they posit that these older, financially independent students are more likely to work because they are already working adults with financial responsibilities. This would include the subset of students for whom the question is not "Why work?" but "Why enroll in school?"

Who Are Working Learners?

In order to better understand and compare the diverse experiences of working learners, we have separated them into two groups based on age. Young working learners are those aged 16-29; we refer to working learners aged 30-54 as mature working learners.[25] The decision to divide working learners into two age groups is for the purpose of clarity; making age 30 the dividing line is somewhat arbitrary. We use age 30 because at that point, most adults (including working learners) will be more established in the labor market and in adulthood.[26]

We also studied the income levels of working learners. We categorize those whose annual earnings place them at 200 percent of the poverty line[27] and below as "low-income working learners." The choices that this group makes – including selection of undergraduate majors and selection of future occupations, along with associated labor market outcomes – are important in assessing the extent to which education has been an important tool for lifting these and similarly disadvantaged groups out of poverty.

Young working learners (16-29) make very different decisions compared to mature working learners (30-54) when it comes to majors selected, hours worked, and career choices

Fourteen million Americans work while enrolled in a higher education institution.[28] Two-thirds of working learners are between the ages of 16 and 29 (Figure 1).

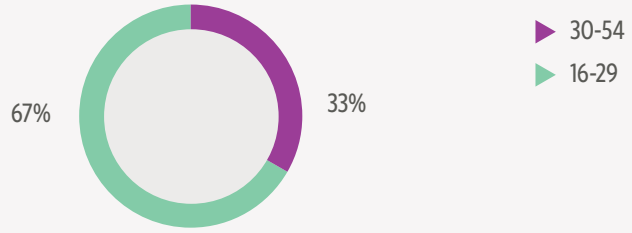
25 Where the data support it, we include data on working learners between the ages of 16-18; for some data sets, this is not possible due to data limitations. In these cases, young working learners are those aged 18-29.

26 This analysis of working learners uses five different data sources (more details in Appendix 1). The differing data sources allowed more detailed analysis of the characteristics of working learners. However, it is important to note that the populations covered are different in each of these databases.

27 The federal poverty threshold changes each year and is determined by family size. Two hundred percent of the poverty level multiplies the federal poverty level by two ($23,540 for a single individual is 200% of the 2015 poverty level).

28 Includes both postsecondary institutions and graduate schools.

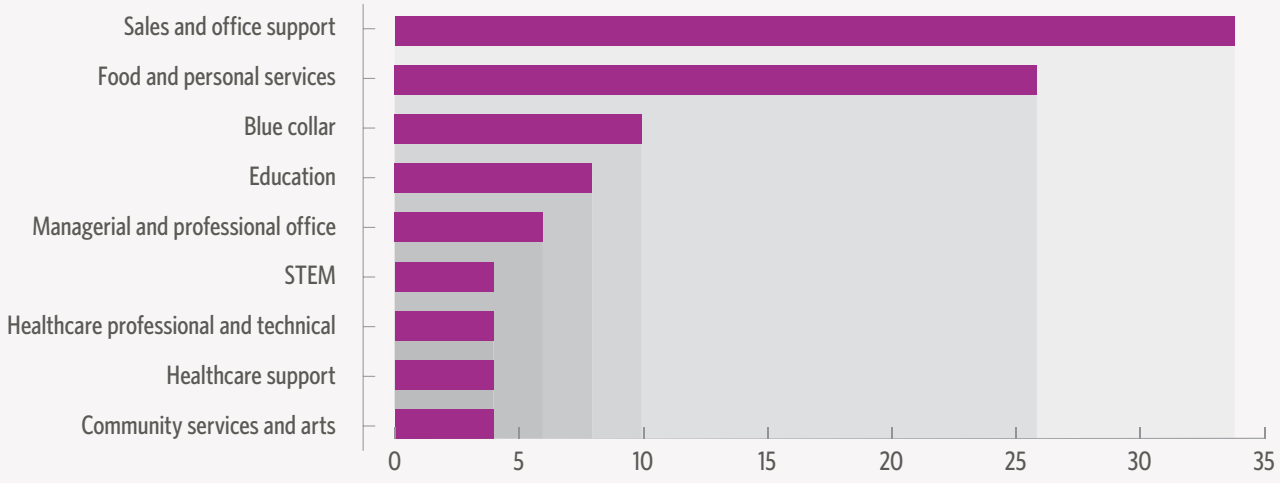
Figure 1. The majority of working learners are between the ages of 16 and 29.



Source: Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau's *American Community Survey* data, 2012-2013.

Sixty percent of working learners work in one of two career fields: sales and office support occupations (34%) and food and personal services occupations (26%) (Figure 2). Many of these jobs are either temporary or part-time. Many working learners leave these jobs after graduating, while others move into higher paying jobs.

Figure 2. More than half of working learners are in sales and food/personal services occupations.

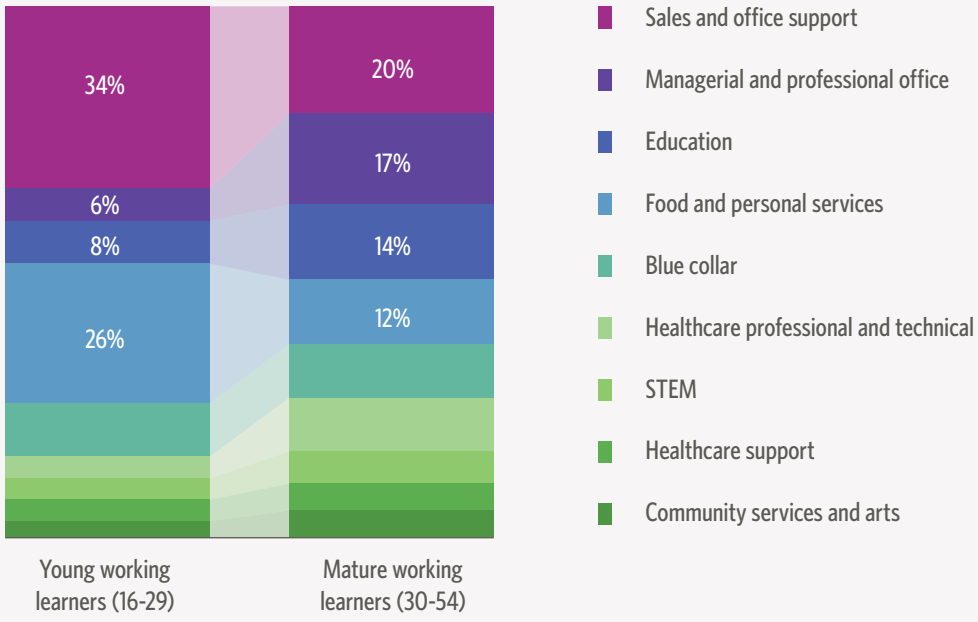


Source: Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau's *American Community Survey* data, 2012-2013.

The distribution of jobs held by working learners varies by age (Figure 3). While more than a quarter of working learners between the ages of 16 and 29 are employed in food and personal service occupations – such as tending bar, supersizing meals, and sweeping hair clippings – the percentage of working learners in those occupations drops to just 12 percent for mature working learners. Working learners transition from food and personal service jobs into managerial positions as they gain experience and credentials.

The majority (51%) of mature working learners are employed in one of three career fields: managerial occupations, education occupations, and sales and office support occupations.

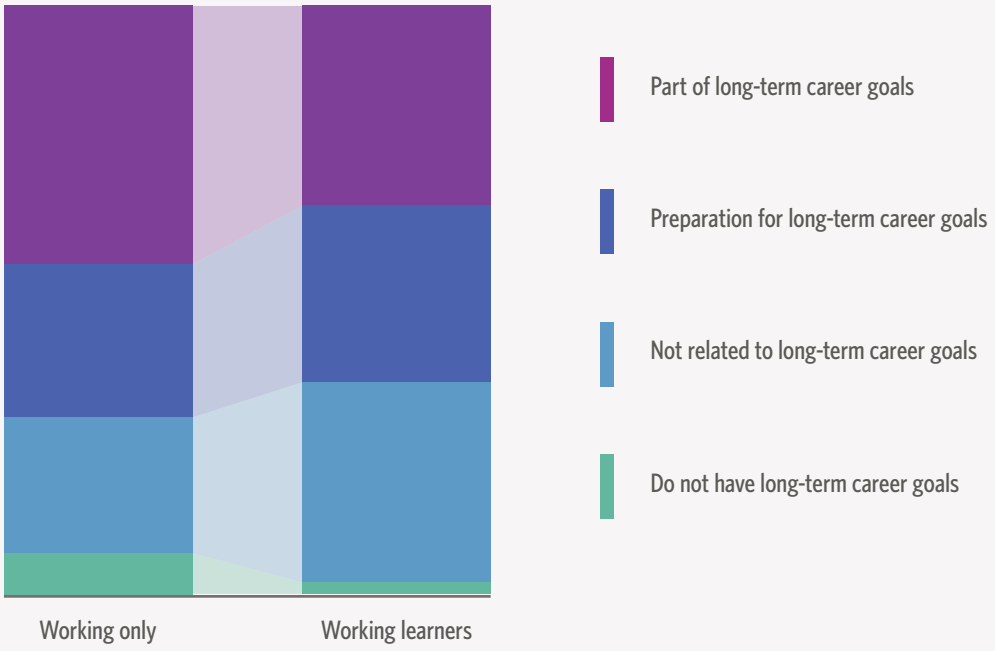
Figure 3. Young working learners are more likely to be in sales and office and food and personal services occupations. Mature working learners are more concentrated in management.



Source: Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau's *American Community Survey data*, 2012-2013.

Working learners are more likely to hold jobs that are not related to their long-term career goals – perhaps waiting tables or doing administrative work in an office – but are more likely than other workers to have long-term career goals (Figure 4).

Figure 4. Working learners are more likely to be working in transitional jobs not related to their long-term career goals.

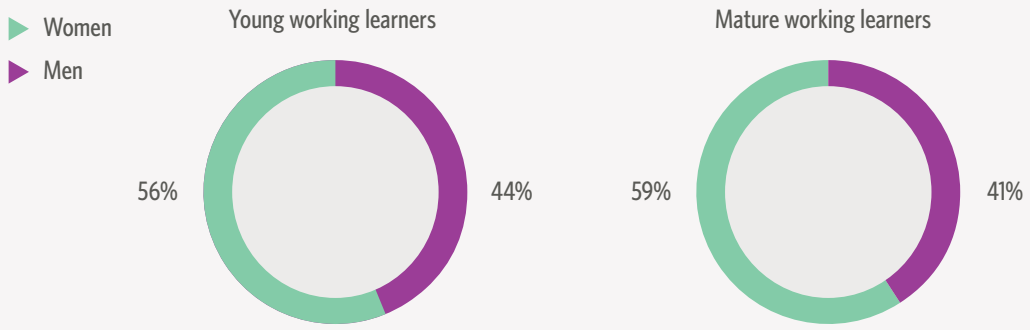


Source: Georgetown University Center on Education and the Workforce analysis of data from the National Longitudinal Study of Adolescent to Adult Health wave 4, 2008-2009.

Nearly 60 percent of working learners are women.

More women than men are enrolled in postsecondary institutions overall, and this is also true for working learners. Indeed, women are more likely than men by a ratio of about 60:40 to be working learners among the young and mature (Figure 5).

Figure 5. Women are more likely to be working learners.



Source: Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau's *American Community Survey* data, 2012-2013.

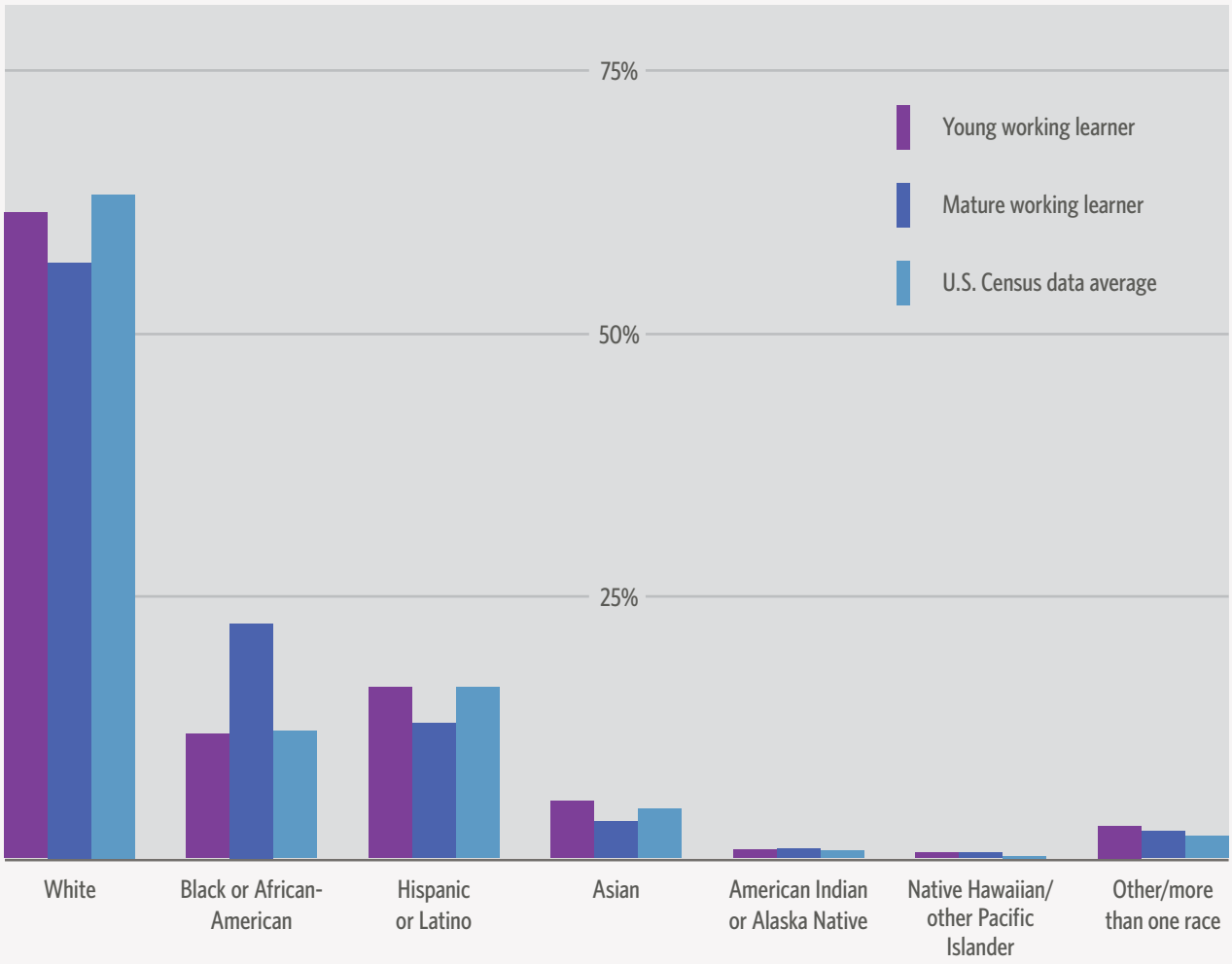
Young working learners are disproportionately white, while mature working learners are disproportionately African-American.

By race and ethnicity, the distribution of young working learners reflects that of the national population. However, as workers age, the share of working learners that is non-white rises – attributable almost entirely to a larger share of African-American working learners.

Within racial and ethnic categories, whites comprise the majority of young and mature working learners (62% and 57%, respectively, compared with 64% for the general population), but the share of African-American working learners nearly doubles among mature working learners (African-Americans are 12% of young working learners and about 23% of mature working learners).[29] Hispanic young working learners are about 16 percent of the working learner population, equal to their share in the general population; this drops to approximately 13 percent among mature working learners. A similar pattern holds for Asians.

29 As illustrated in Figure 6, African Americans represent 12 percent of the total population.

Figure 6. The majority of working learners are white, but mature working learners are disproportionately African-American.

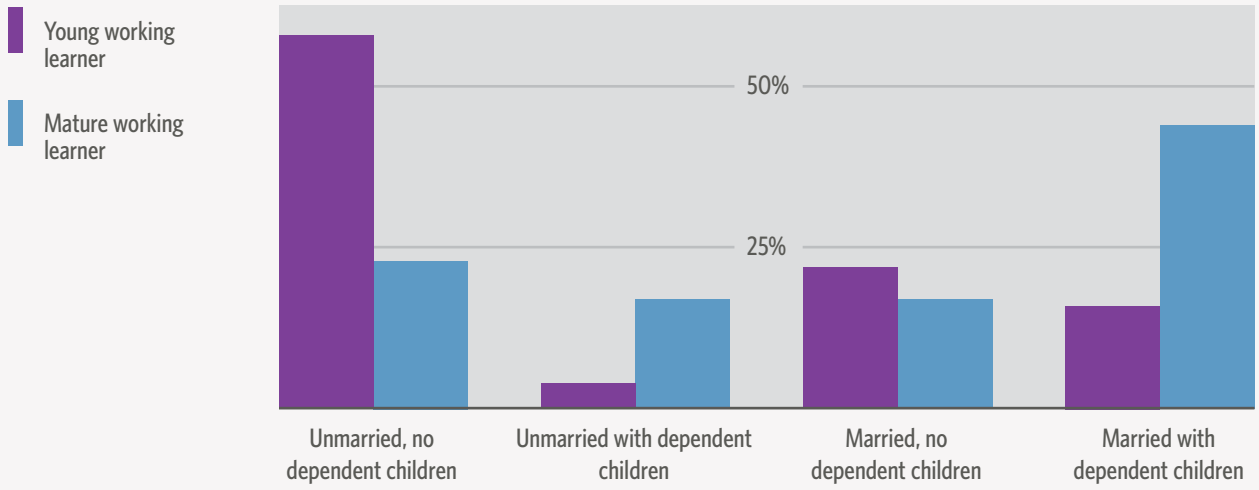


Source: Georgetown University Center on Education and the Workforce analysis of data from the *National Postsecondary Student Aid Review*, 2012 and U.S. Census, 2010.

Mature working learners are more likely to be married with family responsibilities.

Stark differences in family status characterize young working learners and mature working learners – mature working learners are much more likely to be married and have children than their young working learner counterparts (Figure 7). Perhaps unsurprisingly, most young working learners (60%) are single and do not have dependents, compared with less than a quarter of mature working learners. Young working learners are also less likely to be single parents; about 20 percent of young working learners have at least one dependent, but only 4 percent are unmarried; a larger share of mature working learners have dependents (about 60%), but about 17 percent are unmarried.

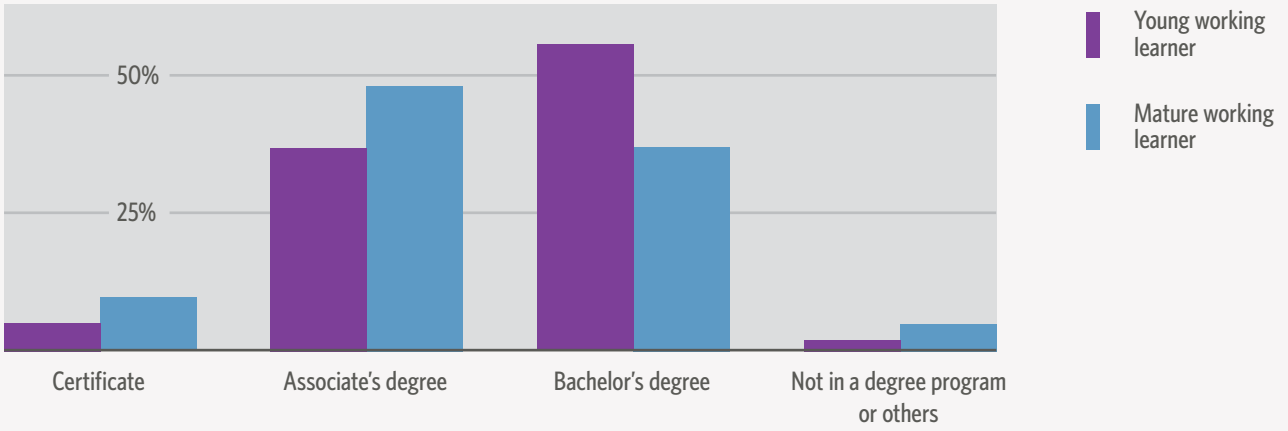
Figure 7. Mature working learners are more likely to be married than young working learners



Source: Georgetown University Center on Education and the Workforce analysis of data from the *Baccalaureate and Beyond Longitudinal Study*, 2012.

Young working learners and mature working learners are generally found in different types of postsecondary institutions, and each group tends to enroll in different types of degree-granting programs. This is likely because mature working learners have greater constraints on their time (as they are more likely to be married and have dependents, as well as to work longer hours). As a result, mature working learners are more prevalent in shorter-duration programs (i.e., those that are two years or less) such as those that provide certificates and Associate's degrees. Likewise, mature working learners are more likely than young working learners to be enrolled in a postsecondary program that does not provide a credential or degree upon completion. These types of programs are often professional in nature and offer a certificate of completion based on attendance and not necessarily completion of a formal examination. Young working learners, by contrast, are most likely to enroll in Bachelor's degree programs offered by selective, doctorate-granting institutions. Fifty-six percent of young working learners are

Figure 8. Young working learners are more likely to be enrolled in Bachelor's degree programs.



Source: Georgetown University Center on Education and the Workforce analysis of data from the National Postsecondary Student Aid Review, 2012.

in baccalaureate programs, compared with 37 percent of mature working learners, whereas 58 percent of mature working learners are enrolled in AA or certificate programs, compared with 42 percent of young working learners (Figure 8). Among those enrolled in Associate's degree programs, young working learners are also slightly more likely to be on an academic/transfer, or general education track, whereas mature working learners are more likely to be in a technical or occupational Associate's degree program (33% of mature working learners are in an occupational track, compared with 26% of young working learners).

Mature working learners are concentrated in open-admission community colleges and for-profit colleges and universities while young working learners tend to go to more selective institutions.

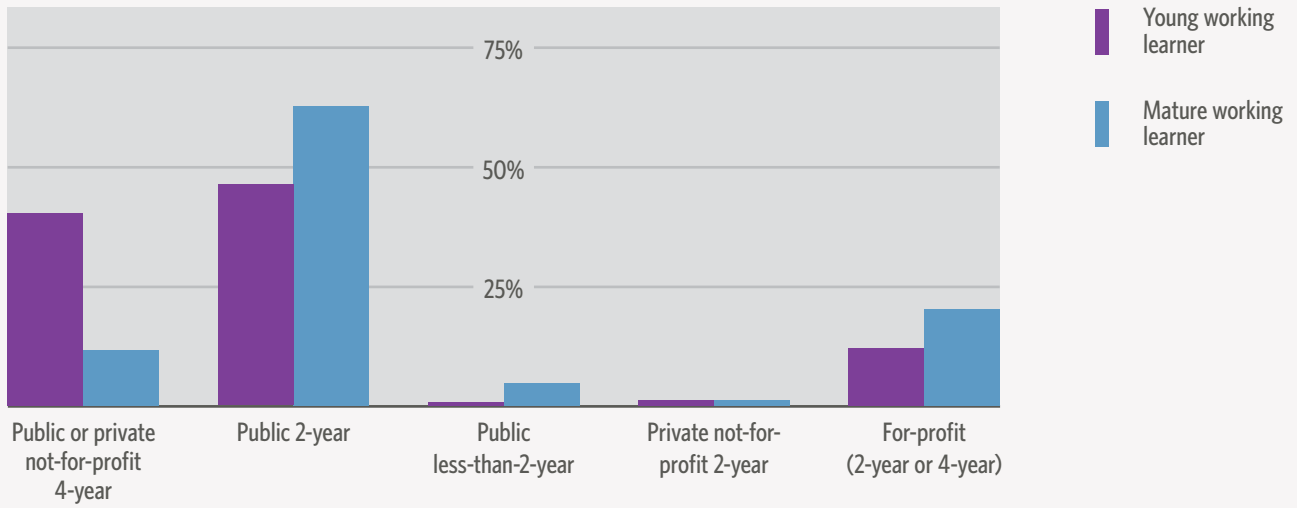
The type of institution working learners attend also varies by age. Almost half (46%) of young working learners attend two-year public colleges, and another 40 percent are enrolled in public and private, not-for-profit, four-year institutions. About 10 percent attend for-profit institutions. By contrast, mature working learners attend two-year public institutions (63%) and for-profit institutions (20%) in greater numbers (Figure 9).

Even among working learners pursuing the same degree, the institution type varies. For example, among those enrolled in Bachelor's degree programs, mature working learners are nine times more likely to be at for-profit institutions compared with their young working learner counterparts (18% of Bachelor's degree-seeking mature working learners are enrolled in for-profit institutions, compared with only 2% of young working learners). By contrast, roughly half (49%) of young working learners are in public, four-year doctorate-granting institutions, compared with just over a quarter (28%) of mature-working learners. [30]

Young working learners tend to go to more selective institutions. For example, while equal numbers (17%) of both young working learners and mature working learners enroll in public, four-year non-doctorate-granting institutions, 17 percent of young working learners enroll in private, not-for-profit four-year doctorate-granting institutions, compared to only 13 percent of mature working learners who enroll in such institutions. Not only are young working learners more likely to attend public two-year and four-year institutions than mature working learners, but such institutions are most likely to be categorized as being either very selective or moderately selective. In fact, more than half of all young working learners attend such institutions. Conversely, nine out of 10 mature working learners attend the least selective institutions.

30 U.S. Department of Education, National Center for Education Statistics, Baccalaureate & Beyond Longitudinal Study, 2008-12.

Figure 9. Mature working learners are concentrated in two-year and for-profit institutions.



Source: Georgetown University Center on Education and the Workforce analysis of data from the *Beginning Postsecondary Students Longitudinal Survey*, 2003-2009.

Young working learners are more likely to select humanities and social sciences majors while mature working learners select healthcare and business.

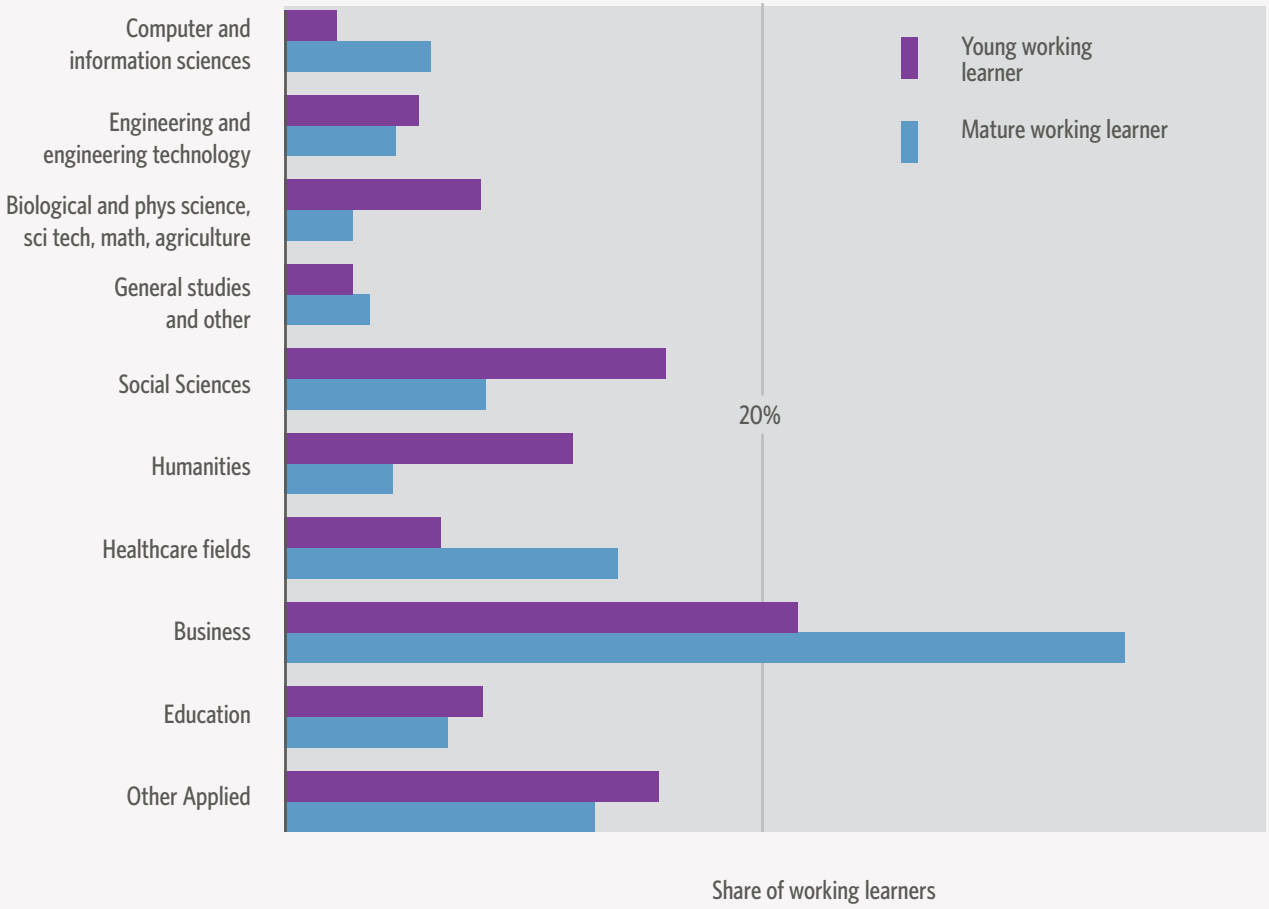
Young working learners are also more likely than mature working learners to be liberal arts majors, in programs such as visual and performing arts, humanities, personal and consumer services, education, communications, English, history, and psychology (Figure 10).

Nearly half (49%) of mature working learners are in either healthcare or business-related majors. Mature working learners are also more likely than their young working learner counterparts to select majors for which the knowledge and skills gained upon completion of the program of study may be applied directly to a future career such as military technology and protective service, public administration, and law/legal studies programs.

Majors selected by young working learners are less likely to be related to their occupations. [31] At the Associate's degree level, young working learners are more likely to be enrolled in general education or transfer programs than their mature working learner counterparts (74% vs. 68%), who are more likely to be enrolled in technical programs (33% vs. 26%).

31 An exception to this general finding applies to young working learners employed in the following technical or specialized fields: artists and designers, sports occupations, and social service occupations.

Figure 10. Business is the most popular major for both young and mature working learners enrolled in Bachelor's degree programs.



Source: Georgetown University Center on Education and the Workforce analysis of data from the *Baccalaureate and Beyond Longitudinal Study*, 2012.

Workforce outcomes differ for young and mature working learners due to:

- Different levels of labor market experience;
- Differing social and familial responsibilities, including dependency status by age; and
- Their self-identification as either "primarily students" or "primarily employees who enroll in postsecondary programs."

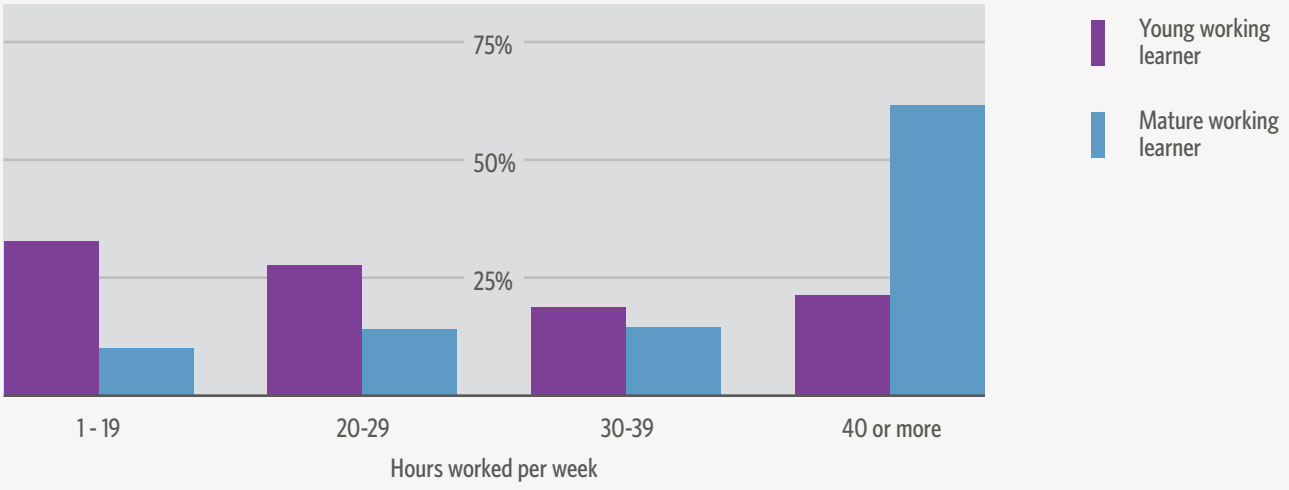
Mature working learners are more likely to be working full-time, but over a third of young working learners work more than 30 hours per week while enrolled.

The mature working learner population divides roughly evenly into those who are enrolled full-time in a postsecondary program and those who are enrolled part-time. Two-thirds of young working learners attend postsecondary institutions full-time.

Logically, with their heavier school responsibilities, young working learners are more likely to be employed part-time. Sixty-three percent of young working learners work fewer than 30 hours per week, and half of those work fewer than 20 hours per week. The number of hours worked varies significantly based on the level of education pursued, which is likely also a function of both age and dependency status (e.g., transitioning from dependent to independent). Eighty-five percent of young working learners who are classified as "dependents" are employed part-time.

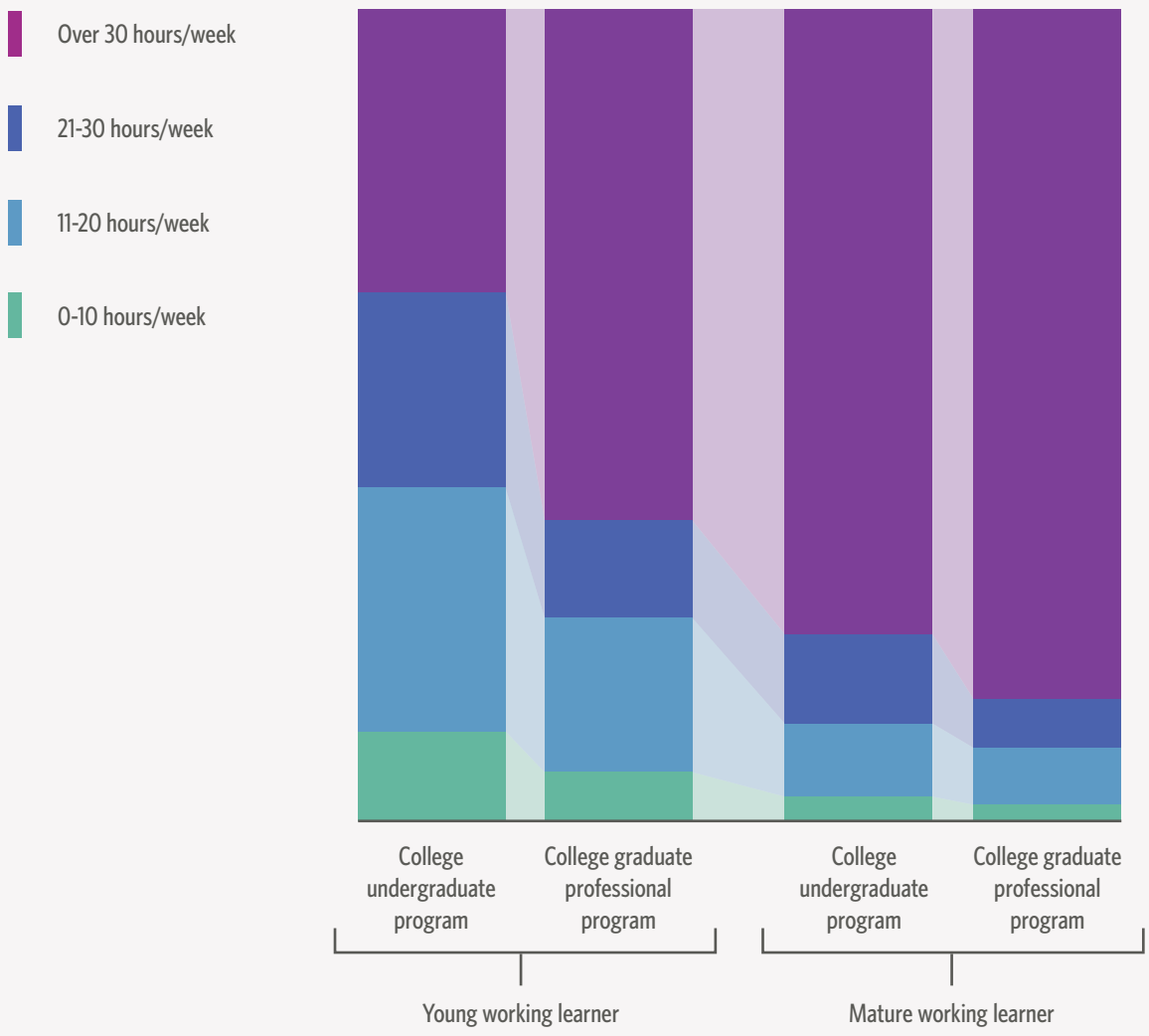
Mature working learners are most likely to work at least 40 hours per week while enrolled. A quarter of mature working learners work part-time while enrolled. These patterns hold true regardless of whether student loans are a factor. Fifty-seven percent of young working learners work 35 hours or fewer each week while enrolled in school.

Figure 11. Mature working learners tend to work longer hours while enrolled.



Source: Georgetown University Center on Education and the Workforce analysis of data from the *Beginning Postsecondary Students Longitudinal Survey*, 2003-2009.

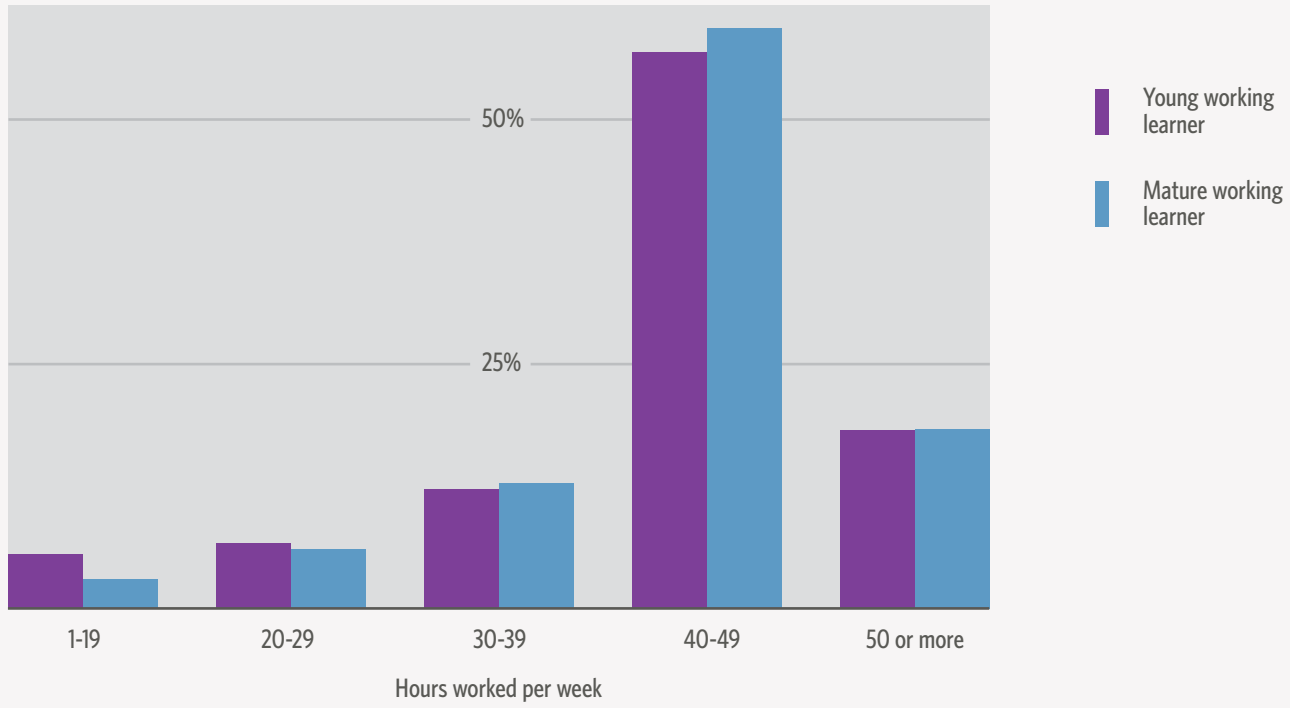
Figure 12. Mature working learners work longer hours, regardless of whether they are enrolled in undergraduate or graduate degree programs.



Source: Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau's *American Community Survey* data, 2012-2013.

While they are enrolled, mature working learners work more hours than young working learners. After they graduate, however, young and mature working learners work similar hours (Figure 12).

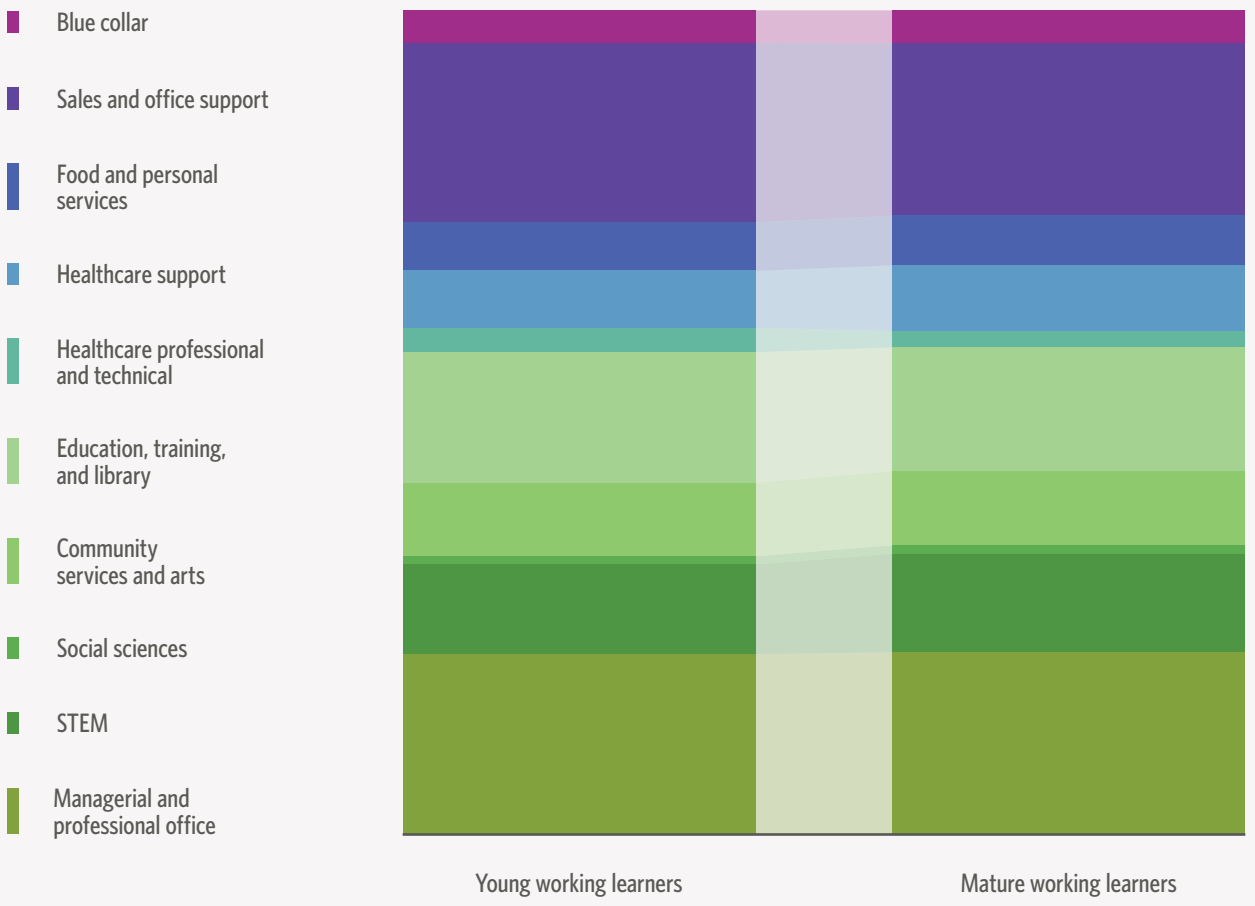
Figure 13. After completion of a Bachelor's degree, young and mature working learners work similar hours.



Source: Georgetown University Center on Education and the Workforce analysis of data from the *Baccalaureate and Beyond Longitudinal Study*, 2012.

Working learners with a Bachelor's degree tend to work in similar occupations, regardless of age or experience. Both young working learners and mature working learners who have attained Bachelor's degrees are employed most frequently in managerial and professional occupations (22% for both groups); sales and office support occupations; education, training, and library occupations; and STEM occupations. As previously noted, mature working learners are more likely to become employed in occupations that are similar to their field of study.

Figure 14. Working learners who have earned a Bachelor's degree work in similar occupations.

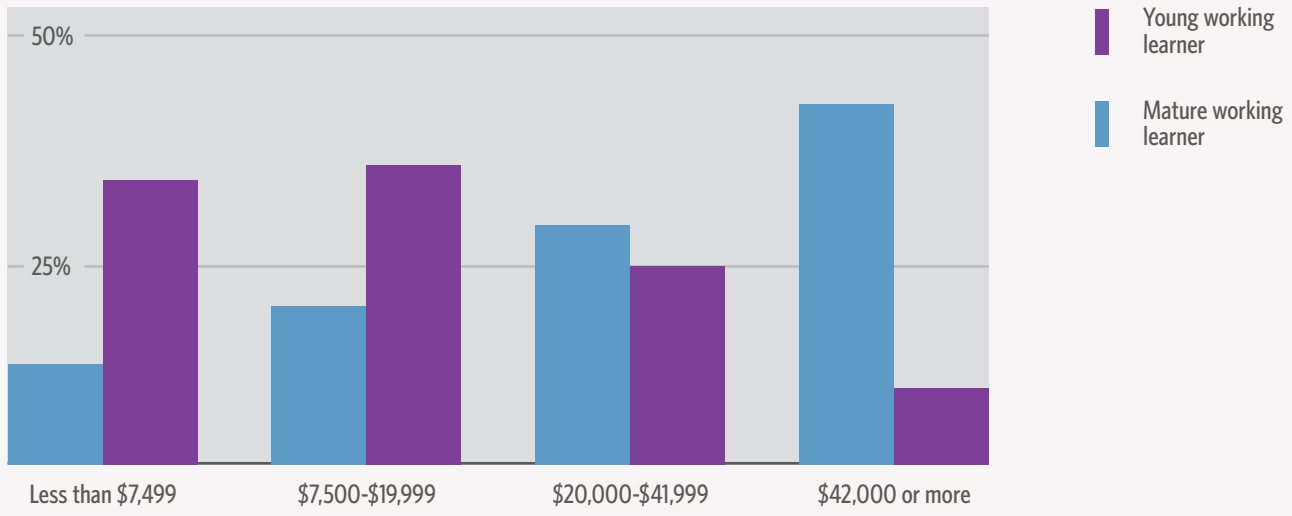


Source: Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau's *American Community Survey* data, 2012-2013.

Mature working learners earn more than young working learners while enrolled.

While enrolled in a postsecondary program, financially independent young working learners earn less than mature working learners. Nearly 70 percent of independent young working learners earn less than $20,000 annually (compared with only roughly 30% of mature working learners). This disparity is likely a reflection of both the total number of hours worked per week, the value of accumulated and reinforced workforce experience, and the greater likelihood of mature working learners working in a professional field.

Figure 15. While enrolled, mature working learners earn more than young working learners.



Source: Georgetown University Center on Education and the Workforce analysis of data from the *National Postsecondary Student Aid Review*, 2012.

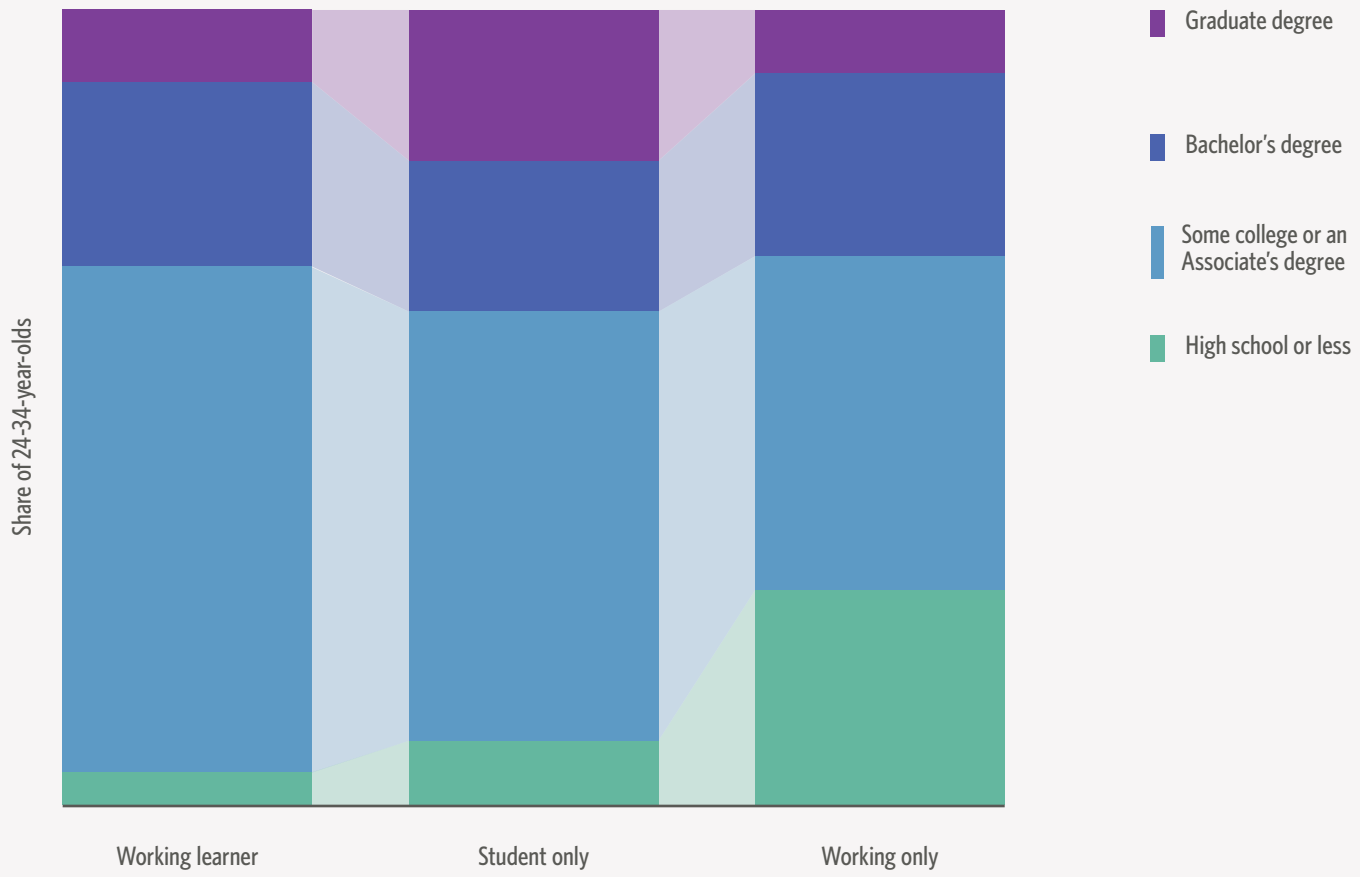
More than half of young working learners (52%) earn less than $43,000 annually, with 42 percent earning between $20,000 and $42,999. Comparatively, only 38 percent of mature working learners earn less than $43,000, with 30 percent earning between $20,000 and $42,999. At the higher end of the income spectrum, about 40 percent of mature working learners earn more than $60,000 per year, compared with 23 percent of young working learners (Figure 16).

Mature working learners are the most likely to earn comparatively higher salaries. More than 75 percent of young working learners earn less than $60,000 annually, whereas only 60 percent of mature working learners, holding the same postsecondary degree, earn less than $60,000 annually.

Figure 16. After completing a Bachelor's degree, mature working learners are more likely to earn high incomes.

Source: Georgetown University Center on Education and the Workforce analysis of data from the *Baccalaureate and Beyond Longitudinal Study*, 2012.

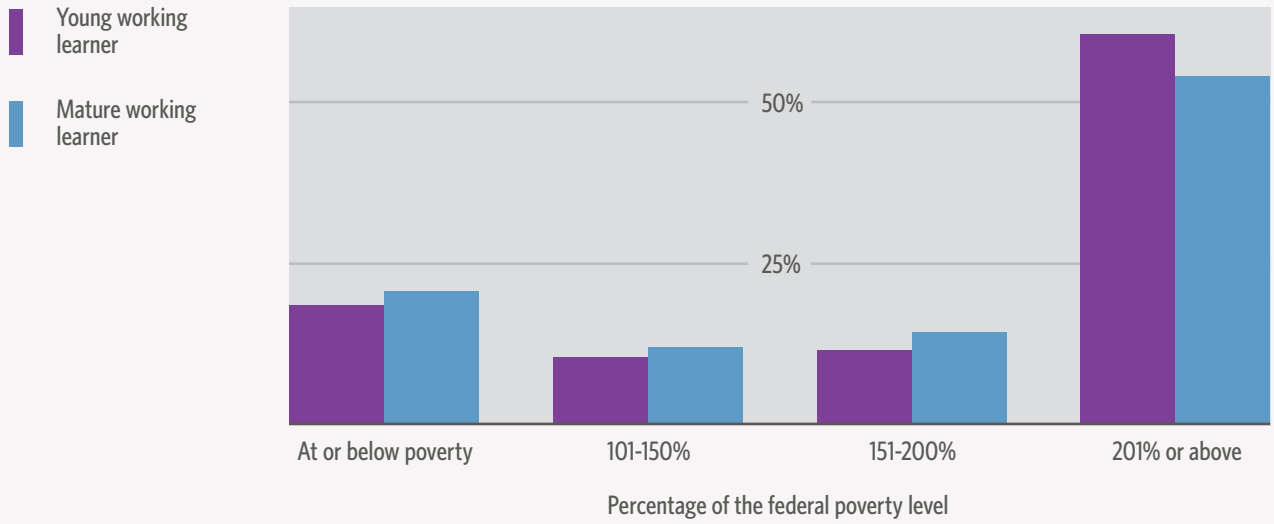
Figure 17. Working learners are more likely to have attended college or gotten a degree than full-time students or full-time workers.



Source: Georgetown University Center on Education and the Workforce analysis of data from the *National Longitudinal Study of Adolescent to Adult Health* wave 4, 2001-2009.

Mature working learners are more likely to be low-income, defined here as at or below 200 percent of the poverty line (Figure 18). Family size is the primary explanation for this outcome. Mature working learners are more likely than their younger counterparts to have dependents. So even if they earn more money, mature working learners may still be poorer because of the number of dependents that they have.

Figure 18. Mature working learners are more likely to be low income,[32] partly due to larger family size.



Source: Georgetown University Center on Education and the Workforce analysis of data from the *Beginning Postsecondary Students Longitudinal Survey*, 2003-2009.

32 We define "low income" as 200 percent of the federal poverty line or less.

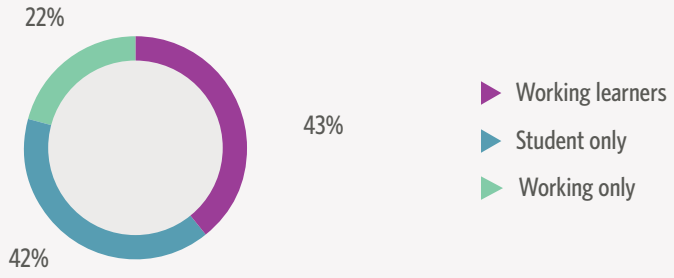
Marital status is the strongest indicator for whether a working learner is in or out of poverty. Young working learners who are married with dependents are financially much better off than young working learners who are unmarried and have no dependents.

Unmarried young working learners and mature working learners who have dependents are comparatively much worse off: 66 percent of independent young working learners and 39 percent of mature working learners who have dependents and earn incomes less than $40,000 are in poverty.

Working learners have less student debt than students who do not work.

Twenty-two percent of students who do not work while in college have more than $50,000 in student debt.[33] Fourteen percent of working learners and 13 percent of workers who are not enrolled in college have a comparable amount of debt.

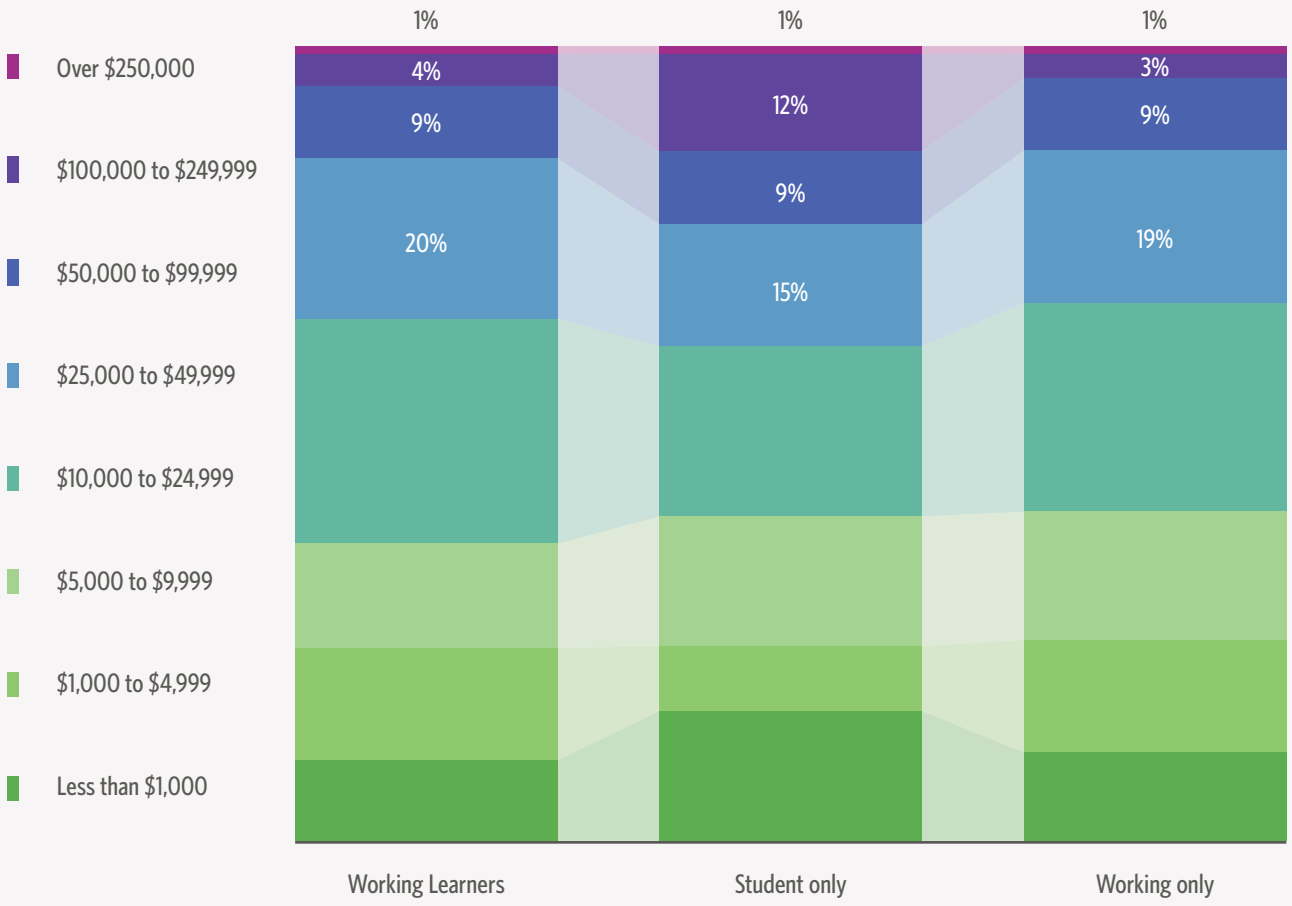
Figure 19. Working learners and students who do not work are equally likely to have student loan debt.



Source: Georgetown University Center on Education and the Workforce analysis of data from the *National Longitudinal Study of Adolescent to Adult Health* wave 3, 2001-2009.

33 To calculate this figure, we took the universe of respondents to the National Longitudinal Study of Adolescent to Adult Health dataset and subdivided them at one static point in time between those who were working learners (working and enrolled), students only (enrolled and not working) and working only (working and not enrolled). Since the "working only" subsample also had accumulated student loans, they were clearly enrolled earlier. Whether or not they were once working learners or students only is not defined in the data.

Figure 20. Thirty-four percent of working learners have $25,000 or more in student loan debt. But the size of debt is comparable among different types of students and workers.

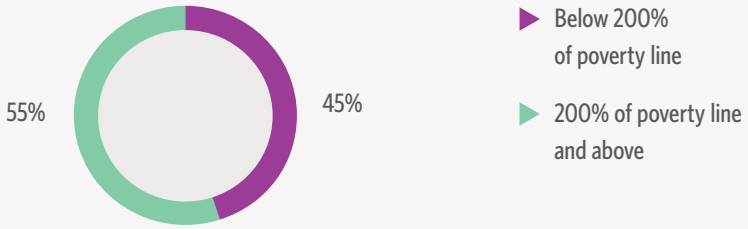


Source: Georgetown University Center on Education and the Workforce analysis of data from the *National Longitudinal Study of Adolescent to Adult Health* wave 4, 2001-2009.

Forty-five percent of young working learners earn 200% of the poverty level ($23,540) or less.

Nearly half (45%) of all young working learners earn incomes that place them at or below 200 percent of the federal poverty line (Figure 21).[34] We call the individuals in this category low-income young working learners. Compared with other working learners who are not poor, low-income young working learners are more likely to be single (92% vs. 84%) or non-citizens (7% vs. 5%).

Figure 21. Just under half of young working learners are low income.

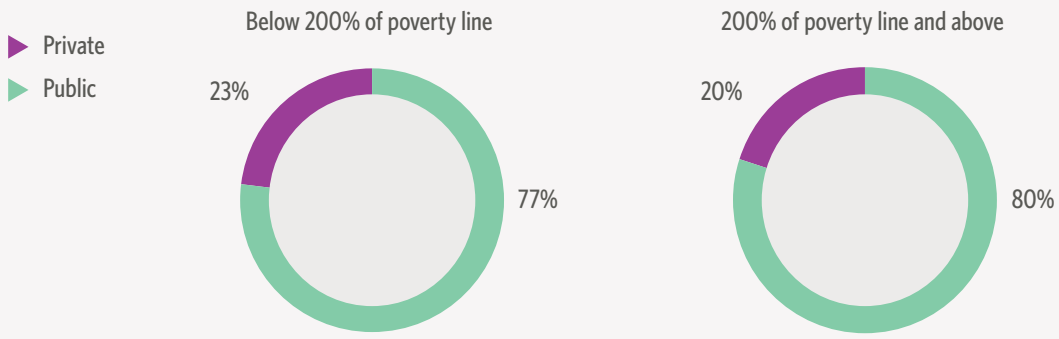


Source: Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau's *American Community Survey* data, 2012-2013.

Compared with their higher-earning peers, low-income young working learners are roughly equally likely to be enrolled in public institutions (77% vs. 80%). While enrolled, low-income young working learners are less likely than their peers to major in education administration, medical and health sciences and services, and fine arts, and more likely to major in biology and life sciences, physical sciences, and psychology.

34 The federal poverty line is defined in relation to the number of individuals in a household. For a single individual, 200 percent of the poverty line is $23,540; for a two-person household, it is $31,860; for a three-person household, it is $40,180; for a four-person household it is $48,500.

Figure 22. Working learners enroll in similar types of institutions regardless of income.

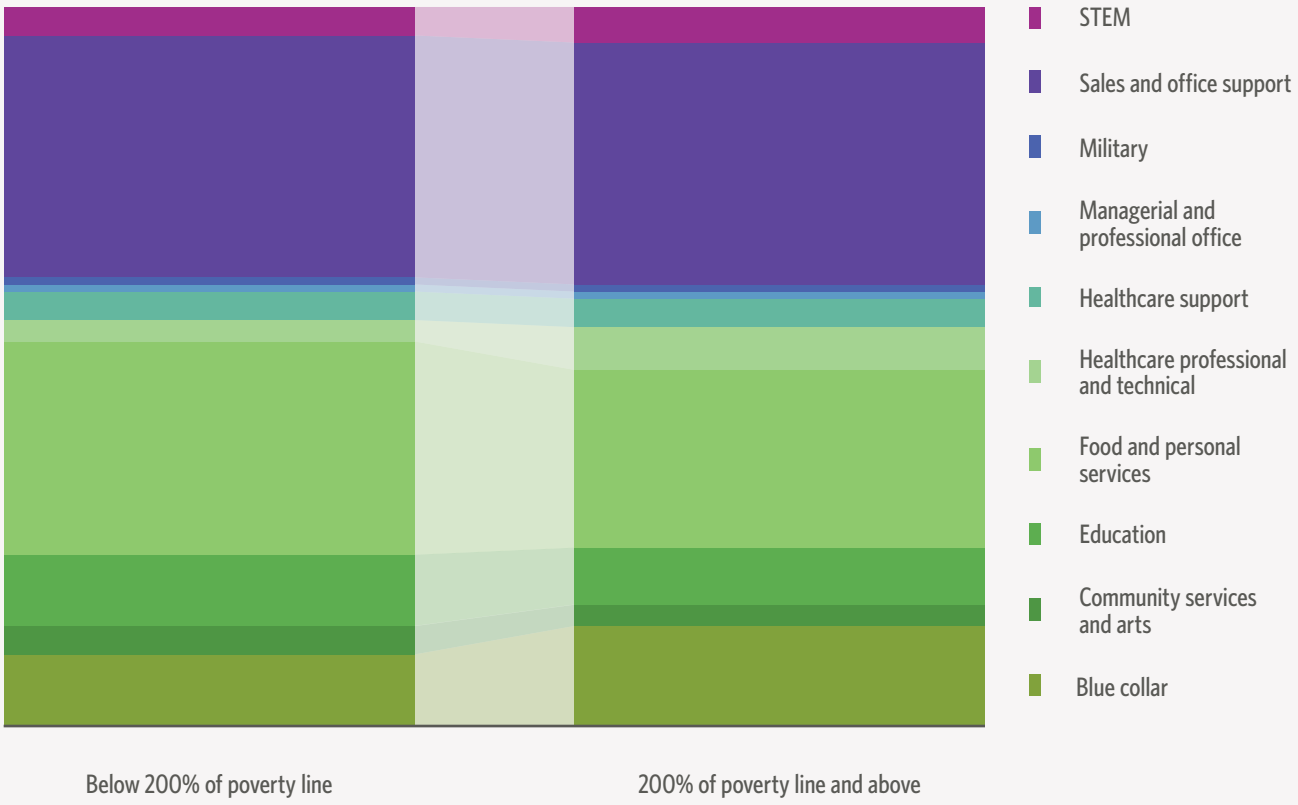


Source: Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau's *American Community Survey* data, 2012-2013.

Low-income young working learners are more likely to be found in food and personal services occupations, and less likely to be in technical healthcare occupations (3% vs. 6%) and in blue-collar occupations (10% vs. 14%) when compared to other working learners. They are also more likely to be working in the education services industry and the leisure and hospitality industry, and less likely to be working in government, in healthcare services, or in wholesale and retail trade.[35]

35 All values in parentheses are comparing low-income working learners, defined as below 200 percent of poverty, to other working learners who are above 200 percent of poverty.

Figure 23. Low-income young working learners are more likely to work in food and personal service occupations.



Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau's *American Community Survey* data, 2012-2013.

After graduating, working learners are upwardly mobile and more likely to move into managerial positions.

In nearly every occupational group (the exception being healthcare support occupations), working learners are less likely to stay in the occupations they were initially in, compared with those who were only working. Moreover, for most occupations, a higher share of working learners ended up moving into managerial and professional occupations than their working-only or student-only counterparts (the exceptions being STEM, blue collar, and those already working in managerial and professional occupations).

Among working learners who were working in education occupations at the start of the survey, about four in 10 (39%) were still working in education by the end of the survey. When compared to other workers who were not enrolled, 68 percent remained in education occupations. Working learners were much more likely than their non-enrolled counterparts to move out of education into managerial and professional occupations and STEM occupations, which suggests that education is in fact an important factor in upward mobility.

Blue-collar occupations appear to be very stable for working learners as they graduate. Fifty-two percent of working learners who were employed in blue-collar occupations remained there five years later. Those working learners who move out of blue-collar occupations, however, are most likely to move into sales and office occupations.

Policy Implications

Working while learning has become the new pathway to achieving the American dream. The 21st century young working learners face barriers that their grandparents did not encounter. Due to the rising cost of college, for example, working learners must finance their college education largely through student loans. It is no longer possible for 21st century students to work their way through college. Student loans pay for tuition, books, equipment, and sometimes the lifestyle needs of college students.

The transition from college to career is now longer than ever, and it is no longer sharply defined. The system that once required one to learn and then earn has been replaced by an expectation of lifelong learning and the continuous upgrading of skills required to adapt to new workplace technologies and an evolving occupational structure. These changes have meant three things to the American worker: training, upskilling, and remaining current.

Because working and learning are now entrenched in the nation's work culture and ethic, working learners are likely to need additional policy assistance, although the type of assistance is likely to vary based on the characteristics of the working learner. We believe that many of the systems already in place could be better coordinated to help the nation's 14 million working learners succeed.

Competency-based education and noncredit education represent new models for attaining credentials that could benefit both young and mature working learners.

Competency-based education (CBE) is based on mastery of competencies rather than on "seat time." Traditional credit-hour-based postsecondary education is grounded in seat-time – the amount of time students spend in class or doing class assignments. By contrast, competency-based education focuses on whether a student masters the relevant material and skills. The competency-based approach is often used in career-focused education and training programs. The curriculum is designed in collaboration with employers to address local labor market needs and the competencies are job-related. These programs prepare students for careers traditionally dominated by men.

For working learners, the competency-based approach makes it more harmonious to combine education and employment. Each competency is job-related, and a working learner can apply it on the job as soon as it is mastered. Employers are often aware of the skills working learners are obtaining and can entrust them with additional responsibilities as they progress through the training. Working learners can get credit for skills they learned on the job by demonstrating mastery

Working learners need stronger ties between the worlds of work and education. Among all programs for working learners in postsecondary institutions, learning and earning is the common currency.

Getting a job is a primary motivation for many students going to college, but they are left largely on their own to connect their postsecondary education choices to an increasingly complex set of career options. Information that connects programs to careers is generally unavailable in college catalogues or on campuses. Career plans never come up in the process of awarding college grants or loans.

Education and employment policy remain isolated in discrete silos of policy and practice. A new approach is needed to better connect postsecondary education and training, and to address the inefficient and inequitable use of education and workforce information. Such an approach would enable students to understand better how their postsecondary education and training options are likely to fit into the job market. It may also motivate institutions to be more accountable for shaping programs to fit their students' needs and matching students to the requirements of the emerging global economy. The good news is that the data and technology needed to create such a system already exist, and the costs of integrating them into a unified whole are low.[36]

of those competencies through prior learning assessments, which allows working learners to complete their educational programs faster. Furthermore, unlike traditional courses in which students may learn some material well and other material not at all and still get a passing grade, students in competency-based courses have to demonstrate mastery of all competencies in the curriculum.

This aspect of competency-based education assures employers that learners have mastered all the relevant skills and knowledge from the training and can apply those on the job. Moreover, the short-term, workforce-focused nature of competency-based education helps ensure that students actually complete it, promoting higher completion rates among CBE students than within the traditional coursework structure

Noncredit education offers a variety of flexible, short-term, workforce-training opportunities. This postsecondary pathway is most likely to appeal to learning workers who spend the majority of their professional time on the job, and who engage in education and training as a way to improve work-related skills and to advance in their career field. Noncredit students are more likely to be mature learning workers. Also, technically focused noncredit programs

36 The American Recovery and Reinvestment Act of 2009 allotted $250 million to be used for statewide data systems that include postsecondary and workforce information, of which up to $5 million may be used for state data coordination and for awards to public or private organizations or agencies to improve data coordination. Up to 2012, 17 states had established these data systems and 21 additional states were in the process of creating such data systems.

are more likely to appeal to men, while women tend to be more concentrated in general education and basic skills noncredit programs. Whites and African Americans tend to be more concentrated in noncredit training than in the general population, whereas Hispanics tend to be underrepresented among noncredit students.†

Noncredit education helps learning workers to stay current with changing techniques and technologies in their field. It also prepares students for industry-based certification and occupational licensing exams. The noncredit education and industry-based certifications and occupational licenses make a harmonious combination. Noncredit education offers a logical way to prepare students for licensing and certification exams, and industry-based certification and occupational licenses provide industry-recognized credentials for students who complete noncredit education. Workers who already have a license or a certification rely on noncredit training to meet continuing education requirements, often associated with maintaining or renewing industry-based certifications and occupational licenses.

† Forthcoming Georgetown University Center on Education and the Workforce report on noncredit education.

The data system that connects postsecondary fields of study and degrees with labor market demands is still a work in progress.

Data connecting college programs to careers are increasingly available via statewide longitudinal data systems that connect student transcript data to earnings and career pathways. A few states — including Florida, Texas, and Washington — began connecting postsecondary education transcript data and Unemployment Insurance (UI) wage records starting in the 1980s. Since 2006, the federal government has spurred further connections between K-12 education, postsecondary education, and wage record data systems by providing more than $600 million in grant funding to 47 states and the District of Columbia.[37] As a result, about a dozen states currently link postsecondary education records with wage records through an established longitudinal data system. A larger number of states have the capacity to share data directly between postsecondary education agencies and workforce agencies.[38]

Some states have not only connected education and workforce data systems, but have also begun to produce information geared toward policymakers, educators, and students. According to the most recent Workforce Data Quality Campaign survey,

37 Government Accountability Office, *Education and Workforce Data: Challenges in Matching Student and Worker Information*, GAO-15-27, November 2014.

38 State Higher Education Executive Officers Association, *Strong Foundations: The State of State Postsecondary Data Systems*, 2012.

13 states have developed scorecards that report results from particular programs and institutions, so that students and workers can compare programs. Twenty more states are making progress toward this goal.[39] For example, Arkansas in 2014 issued its most recent *Education to Employment Report* that shows earnings outcomes by education level, credential, and type of program.

At the same time, there is a growing bipartisan consensus in Washington that greater transparency is needed regarding data on the outcomes achieved by higher education institutions and programs. The U.S. Department of Education is set to release new data – beyond what is available through the College Scorecard – that will help students, families, and counselors make informed decisions about going to college. In May 2015, a bipartisan group of lawmakers introduced legislation that requires the collection of earnings metrics for programs and institutions. Student data submitted by higher education institutions would be connected with earnings data held by the Social Security Administration.[40]

Employers are creating new plans to assist their workers in obtaining postsecondary credentials.

A number of employers, beginning in early 2014, have been stepping forward with innovative new plans to assist their workers with obtaining college degrees and other postsecondary credentials. Google, Apple, BP, Smuckers, Deloitte, and Raytheon provide anywhere from $5,000 per year to 100 percent full reimbursement for college courses. Fiat Chrysler announced in May 2015 that it would provide full tuition assistance for dealership workers through Strayer University.

The only prerequisite is that, in many cases, such courses must be pre-approved, related to personal development within the company, or contingent upon continued service requirements. Many other companies also provide some form of tuition-assistance funding, though these are often less generous. For example, McDonald's, through its Archways to Opportunities program, provides partial tuition coverage at community colleges of up to $700 a year for workers and up to $1,050 for managers.

The money can be used to attend classes online or in-person and, depending on variations in tuition and fees, can cover one to two classes each year. Wal-Mart provides employees and their family members an annual 15 percent tuition "savings and book grant" for the online degree program of its educational partner, American Public University. However, employees must work full-time for one year in order to be eligible for the discount.

39 Workforce Data Quality Campaign, *State Progress on Workforce Data*, October 2014.

40 The Student Know Before You Go Act was introduced in the House of Representatives (H.R. 2518) by Rep. Duncan D. Hunter, R-Calif., with Reps. Mia Love, R-Utah, John C. Carney, Jr., D-Del., Trey Gowdy, R-S.C., Paul Ryan, R-Wis., Susan A. Davis, D-Calif., Jared Polis, D-Colo., and Doug LaMalfa, R-Calif. It was introduced in the Senate (S. 1195) by Sen. Ron Wyden, D-Ore., with Sens. Marco Rubio, R-Fla., and Mark R. Warner, D-Va.

Available career counseling in colleges is very limited and is rarely based on any data about the economic value of college majors.

Currently, postsecondary students often do not consider their careers until they complete their programs of study. By then it can be too late. American society invests enormous amounts of money and energy in the preparation, testing, and admissions process that marks the transition from high school to a postsecondary experience — a period that spans only a few years in a person's life. At the same time, it invests very little in preparing that person for the great economic sorting that marks the transition from college to work — a process that will determine, in most cases, what that person will do after breakfast for the next 45 years.

American society needs to pay attention to careers at the beginning of the postsecondary process, not at the end. While it is true that people who choose majors or careers too soon tend to leave that field at a higher rate than those who choose later, the consequences for people who choose too late are more severe. Students who wait to the very end to make career decisions often experience the academic equivalent of buyer's remorse. The exposure or exploration model that allows a person to find his or her true talent and passion while in college is great – if the person can afford it. For everyone else, better decisions depend on better access to information that links training and education to careers.

This is especially true for adult working learners who return to college and do not have time for exploration. For this group of working learners, decisions have to be timely and precise.

Personal counseling, career counseling, comprehensive financial counseling, and basic information on how to navigate careers require access to social capital that many young working learners never get.[41] The best way to relay this information to working learners is through a counseling system at college. Many schools offer these types of "Career Ready," "Career Exploration," or "Success after College" courses already, but they are often optional and, at best, arbitrary. We propose that this counseling system should be information-based, available at the beginning of a person's education pathway, and mandatory for all students.

The governance, accreditation, and financing of postsecondary education are essentially disconnected from outcomes after college, especially from learning and earning in particular fields of study. This awkward reality leaves employers and policymakers as much in the dark as students, and creates a runaway cost spiral driven by institutional prestige rather than learning-and-earning outcomes.

41 Grubb, *Like, What Do I Do Now?*, 2006.

Tying career outcomes to fields of study is still an afterthought in postsecondary policy.

The gold standard for higher education among postsecondary reformers has shifted from access to cost and completion, but the current emphasis on completion raises the question: Completion for what purpose?

The current focus on college completion is a reactive reform goal in response to runaway costs and high levels of college dropouts. Completion is a goal that presumes no outcomes beyond seat time and credit accumulation. It ignores the relationship between learning and earning in particular fields of study as well as the social and economic value of general education outside academe.

Completion — as well as associated metrics like time to completion and cost per completion — is an inadequate outcome standard. While college completion and related outcome standards can improve internal efficiencies in higher education, these kinds of internal metrics don't necessarily improve the broader economic utility of postsecondary investments.

The traditional Bachelor's degree-centric model has limited utility in a world focused on workforce development.

The growing diversity in postsecondary offerings mirrors a growing diversity among student needs. The popular conception of college as four years of full-time residential study applies, as this report shows, to a smaller and smaller proportion of college students. Yet that "preferred" model is the basis for most planning at colleges. It places its primary emphasis on a process of self-discovery and on an expanding global awareness through a sampling of traditional academic disciplines.

The traditional model addresses career concerns through the use of majors, but courses in major fields of study only make up 30 percent to 40 percent of the 120 or so credit hours required for the Bachelor's degree. The courses in a student's major have become the rough compromise between career-related learning and general education.

However, market realities have interceded. Colleges and universities, even traditional liberal-arts colleges, have created more career-specific majors — two-year degrees and certificates as well as baccalaureate and graduate programs — that promise to provide students with skills that are more closely

aligned with the needs of the workforce. These career-related fields of study now dominate the postsecondary system. Since 1970, the proportion of baccalaureate degrees awarded in the humanities, education, and social sciences has fallen from 61 percent to 38 percent.[42] Roughly 80 percent of Bachelor's degree majors are aligned with occupations. In two-year colleges, the traditional Associate of Arts (AA) degrees that emphasize general education are still dominant. But the Associate of Science (AS) and Associate of Applied Science (AAS) degrees are approaching 43 percent of two-year awards.[43]

The vast majority of students are now non-traditional learners who may have the inclination but lack the time and money to pursue the rich mix of general and specific coursework offered by the preferred model.

Perhaps the most telling problem with the traditional residential four-year model is that not everybody who might want it can afford it. For example, if everybody who went to college got a four-year degree, the cost to society would be enormous, particularly since the average cost of training would increase substantially for nontraditional populations.

The Starbucks/Arizona State University Model: A Novel Partnership

Perhaps the best-known postsecondary incentive plan was created by Starbucks. The company announced in 2014 that its College Achievement Plan (CAP) would allow employees to pursue a Bachelor's degree in partnership with Arizona State University through ASU's online distance learning program EdPlus, at no cost to the student.

Out of 4,000 applicants, roughly 1,800 Starbucks CAP students were enrolled in the inaugural cohort during the second half of the ASU Online Fall 2014 semester. Originally, the program was only offered to eligible juniors and seniors who had earned at least 56 college credits and who had been employed for 45 days. However, Starbucks announced in May 2015 that the program would expand to include all eligible Starbucks employees. Starbucks has a goal of 25,000 employees with Bachelor's degrees by 2025. This $250 million effort will also seek to enroll and employ 10,000 "Opportunity Youth" who are identified as "16-to-24-year-olds who face systematic barriers to meaningful jobs and education."

42 National Center for Education Statistics, "Digest of Education Statistics, 2013" Table 318.20.

43 Analysis of *Current Population Survey* differentiation between general and occupational AAs, 2014, ages 25-35.

Working learners need competency-based postsecondary curricula that drill down below overall degree attainment and programs of study to the cognitive and non-cognitive competencies required for them to move along particular occupational pathways.

Employers traditionally use educational attainment as an indicator of potential for learning on the job since they have no evidence of proven competence. Educational attainment provides entry qualifications for lifetime learning on the job. Outside colleges and universities, employers are the largest providers of formal education and training. Employers account for $177 billion of the $650 billion spent annually on formal postsecondary education and training. Employers also spend $413 billion each year on informal on-the-job training. Altogether, the sizes of employer-based formal and informal training systems and formal postsecondary education are roughly equivalent.

The use of education to signal an employee's potential performance has increasingly become a crucial determinant of lifetime opportunity because education allocates access to human capital development in labor markets. Those with the best education credentials have jobs with the best access to the most powerful and flexible technology that complements human potential rather than technology that substitutes for human potential— for example, the portable PC versus the keyboard cash register with the pictures of fries and hamburgers at McDonald's. Academic preparation and learning on the job are sequential and cumulative, snowballing into increasing advantages over a lifetime of working and learning on the job. These advantages also accumulate across generations reinforcing race, ethnic, and class divisions in earnings.

Over time, the general relationship between postsecondary attainment and earnings has become stronger, but it is most pronounced in career-oriented majors. Where a college degree used to be enough to enter and succeed in many occupations, the alignment between particular fields of study and career pathways has become more important.

The relationship between postsecondary fields of study and careers are only a rough proxy for a deeper and more dynamic relationship between competencies taught in particular curricula and competencies required to advance in particular occupationally based careers.

Career competencies taught in postsecondary curricula ultimately derive from the competencies required to perform the ever-changing bundles of tasks, activities, and technologies in occupationally based career pathways.

Those competencies are knowledge, skills, and abilities.

- ***Knowledge competencies*** are content domains familiar to educators as fields of study from math and the sciences to the humanities, and include more applied disciplines like accounting. Learning in knowledge domains is the most obvious overlap between schooling and work. It is where fields of study in schools overlap with occupational pathways most clearly and early on in careers.

- ***Skills*** are competencies that promote further learning, problem solving, and innovation. Skills are best learned in the context of knowledge domains. For example, problem solving and critical thinking skills are qualitatively different for historians, engineers, and teachers. In addition skills are acquired both in school and through formal learning, informal learning, and experience on the job.

- ***Abilities*** such as creativity, mathematical reasoning, and oral and written expression are competencies defined as partly innate and partly developed through schooling and experience.

There are both academic and non-academic dimensions to cognitive knowledge, skills, and abilities. There are qualitative differences in the use value of these cognitive competencies between academic and more applied environments, for example. They can be learned differently – the traditional difference between book learning and applied learning or, more formally, the difference between pedagogy in academic settings and andragogy in more applied settings and in adult education.[44] In addition to the cognitive competencies, there are more personal competencies that determine a successful match between individuals and occupational pathways. These commonly include:

- Work style. This is a personal characteristic that can affect how well someone does a job. Some of these characteristics are creativity, leadership, analytical thinking, attention to detail, integrity, social orientation, stress tolerance, teamwork, independence, and adaptability.

44 Knowles, Holton, and Swanson, *The Adult Learner*, 2005.

- Work values. Important outcomes for individuals include recognition, achievement, working conditions, security, advancement, authority, social status, responsibility, and compensation.

- Work interests. These are individual preferences for the work environment. Interests are classified as realistic, artistic, investigative, social, enterprising, and conventional.

- Personality. This is the combination of characteristics or qualities that form an individual's distinctive character. While some aspects of personality are innate, they have a substantial influence over behavior both in school and in the workforce.

The summative competency in careers is *tacit knowledge*, the integration of cognitive and personal competencies with experience that allows peak performances. It is the knack that allows some doctors to make the fastest and most effective diagnoses, the sales worker to close, the analyst to see the trend in mountains of data, and the politician to appeal to an audience of one or one million. Tacit knowledge is not easily shared or communicated to other individuals. It consists of beliefs, ideals, and value systems that are deeply ingrained into our subconscious.[45]

The overlap between postsecondary education and career learning is a huge uncharted territory.

About $772 billion is spent annually on postsecondary education and training. About 65 percent of this total is spent outside of the formal postsecondary education system. If society is going to respect the career dimension to postsecondary learning, it will need to open multiple new avenues between traditional postsecondary programs and new ideas in postsecondary policy, including:

- New forms of accreditation for alternative programs with labor market value and alternative delivery (i.e., technology-based online programs);

- Substitution of learning outcomes for credit hour-based funding and completion;

- Added support for competency-based programs that align occupational and general work-based competencies with postsecondary curricula;

- Performance-based funding for programs tied to employment, earnings, and occupationally based career pathways;

- Subsidies for counseling tied to career pathways;

- More work study in jobs closely related to student's chosen major, including internships and apprenticeships;

45 Polyani, *The Tacit Dimension*, 1966.

- Stronger tax breaks for employer-provided tuition assistance including eligibility for certificates, industry-based certifications, occupational licenses, and other kinds of learning with labor market value;
- Stronger incentives and stronger standards for institutional recognition for work experience as accredited learning toward postsecondary awards; and
- Expansion of support for noncredit learning leading to employment, industry-based certifications, and occupational licenses.

Existing policies inside and outside the postsecondary policy realm could be altered to be of greater assistance to working learners.

In many cases, existing programs could be extended or modified. For example, Trade Adjustment Assistance and the Workforce Innovation and Opportunity Act (WIOA) are policy tools that help working learners who are retraining or transitioning into new careers. Extending or adjusting the existing tax credits could also be effective; for example, providing tax breaks to companies that employ advancing working learners or raising the limit on the amount that individuals can claim for educational credits on their tax returns (the current maximum is $5,250).

More flexibility in applying aid – such as the Pell Grant – is likely to help working learners who are enrolled part-time and those who are enrolled in non-degree programs. In other instances, new policies and programs may be necessary. For example, childcare support is likely to assist working learners who have children. Other examples include establishing an emergency loan fund for students' unanticipated major expenditures (which may be successful in improving retention and degree attainment) and leveraging loan forgiveness or support (which is likely to help working learners who take out loans as part of an educational financing strategy).

Working learners who are low-income, who come from a family without a postsecondary credential, or who are not adequately prepared for postsecondary education are likely to be the most difficult group to assist. They are least likely to be helped simply by changing policies. These working learners are more likely to be culturally disconnected from college, and have lower persistence and completion rates than others. Unlike transitioning and advancing working learners, they do not necessarily have the goal or incentive of a guaranteed job in front of them. More information and experimentation is needed to ascertain what kind of support would enable them to succeed in school and be more successful in the labor market.

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Appendix 1. Data Sources

In preparing this report, the Georgetown University Center on Education and the Workforce analyzed five different databases to get a full picture of the characteristics of working learners. The multiple sources were necessary to understand different aspects and traits of working learners. Also, by studying multiple databases, the authors were able to confirm that the findings were consistent. However, because each database is different, they studied different populations. The following is a brief description of each of the databases and the populations that are covered by each.

The American Community Survey

The American Community Survey (ACS) is an ongoing nationally representative survey conducted by the U.S. Census Bureau that provides information on a yearly basis about the United States and its people. The ACS obtains data about jobs and occupations, educational attainment, veterans, and whether people own or rent their home, among other topics. In particular, ACS contains information on family interrelationship, demographics, health insurance, education, work, income, occupational standing, migration, disability, and veteran status.

The National Longitudinal Study of Adolescent to Adult Health

The National Longitudinal Study of Adolescent to Adult Health is a nationally representative longitudinal sample of adolescents who were in grades 7-12 in the United States during the 1994-95 school year. The respondents have been followed into young adulthood with four in-home interviews conducted in 1995, 1996, 2001-2002, and 2007-2008. The most recent interviews in 2007-2008 occurred when the respondents were between the ages of 24 and 34. This survey looks at social, economic, psychological, and physical well-being with contextual data on their families, neighborhoods, communities, schools, friendships, peer groups, and romantic relationships.

National Postsecondary Student Aid Study (NPSAS:12)

The National Postsecondary Student Aid Study is a large, nationally-representative sample of postsecondary institutions and students that contains student-level records on demographics and family background, work experience, expectations, receipt of financial aid, and postsecondary enrollment. NPSAS data come from multiple sources, including institutional records, government databases, and student interviews. NPSAS examines the characteristics of students in postsecondary education, with special focus on how they finance their educations. The NPSAS:12 sample represents approximately 26 million undergraduate and 4 million graduate students enrolled in postsecondary education at any time between July 1, 2011 and June 30, 2012.

The Baccalaureate and Beyond Longitudinal Study

The Baccalaureate and Beyond Longitudinal Study (B&B) examines students' education and work experiences after they complete a Bachelor's degree, with a special emphasis on the experiences of new elementary and secondary teachers. Following several cohorts of students over time, B&B looks at Bachelor's degree recipients' workforce participation, income and debt repayment, and entry into and persistence through graduate school programs, among other indicators. B&B draws its initial cohorts from the National Postsecondary Student Aid Study (NPSAS).

Beginning Postsecondary Students Longitudinal Study

The Beginning Postsecondary Students Longitudinal Study (BPS) currently surveys cohorts of first-time, beginning college students at three points in time: at the end of their first year, and then three and six years after first starting in postsecondary education. The study collects data on student persistence in and completion of postsecondary education programs, transition to employment, demographic characteristics, and changes over time in their goals, marital status, income, and debt, among other indicators. Like the Baccalaureate and Beyond study, the BPS draws its initial cohorts from the National Postsecondary Student Aid Study.

Learning While Earning: The New Normal can be accessed online at cew.georgetown.edu/workinglearners

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