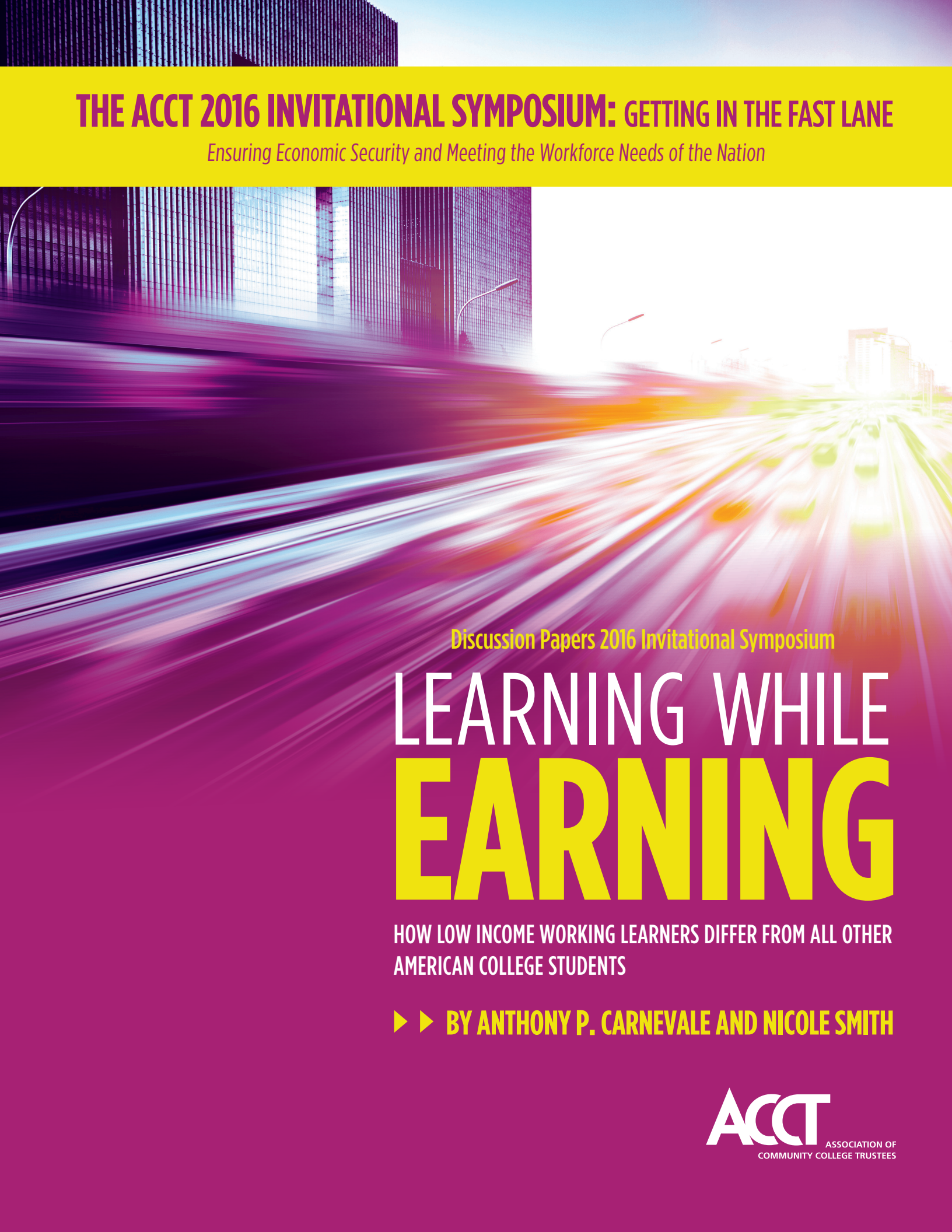

THE ACCT 2016 INVITATIONAL SYMPOSIUM: GETTING IN THE FAST LANE

Ensuring Economic Security and Meeting the Workforce Needs of the Nation

Discussion Papers 2016 Invitational Symposium

LEARNING WHILE EARNING

HOW LOW INCOME WORKING LEARNERS DIFFER FROM ALL OTHER AMERICAN COLLEGE STUDENTS

BY ANTHONY P. CARNEVALE AND NICOLE SMITH

ACCT
ASSOCIATION OF COMMUNITY COLLEGE TRUSTEES

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The ACCT discussion paper series, ***Getting in the Fast Lane: Ensuring Economic Security and Meeting the Workforce Needs of the Nation***, is supported by Strada Education Network, formerly known as USA Funds.

ACCT represents the community college trustees who govern our nation's community, technical, and junior colleges. ACCT aims to foster the principles and practices of exemplary governance while promoting high quality and affordable higher education, cutting-edge workforce training, student success, and the opportunity for all individuals to achieve economic self-sufficiency and security.

Strada Education Network is a nonprofit corporation that supports Completion With a Purpose, building a more purposeful path for America's students to and through college and on to rewarding careers and successful lives. Strada Education Network pursues its nonprofit mission through philanthropic activities and partnerships, policy research, and programs and services that enhance preparation for, access to and success in higher education.

The conclusions in this report do not necessarily represent the official positions of ACCT or Strada Education Network.

ACCT ASSOCIATION OF COMMUNITY COLLEGE TRUSTEES

Strada EDUCATION NETWORK

INTRODUCTION

In partnership with Strada Education Network, formerly known as USA Funds, the Association of Community College Trustees (ACCT) hosted its seventh Invitational Symposium on Student Success in October 2016. The Symposium focused on how to improve the return on students' investments in higher education.

Papers prepared by five researchers were delivered during the symposium. Authors explored the value of obtaining an Associate degree and presented data on both the opportunities and the challenges students face in obtaining a sub-baccalaureate degree or credential. These papers are meant to help inform boardroom discussions and to give policymakers and community college leaders tools and data to support these important discussions. Each paper also provides a study guide with questions to help spur these critical conversations.

Community colleges provide an affordable pathway for many to the middle class, equipping students with degrees or other credentials that can lead to gainful employment and helping to match prospective workers with unfilled job openings. The purpose of these papers is to provide perspectives on how well community colleges meet the needs of their students and if they are, in fact, providing students with a viable path to economic advancement.

Researchers from the Georgetown University Center on Education and Workforce, Anthony Carnevale and Nicole Smith examine the challenges working students face and the impacts of these challenges on completion and debt. They break down the data by age and dependency, financial well-being, number of hours worked, and race and ethnicity. Further, they note that working and paying tuition and fees as you go is no longer an option for the majority of America's college students; however, community colleges and public four-year colleges may still facilitate a pay-as-you-go option. Students pursuing postsecondary credentials and/or wishing to attain the skills necessary to land a good job will need support from career counselors to navigate their options, and they will need to have a deep understanding about the economic value of their selected major.

To view the researchers' presentations and to download a PDF version of these papers, please visit the ACCT Trustee Education website at: www.trustee-education.org/.

We wish to thank the authors, Strada Education Network and ACCT staff who helped support the completion of these reports.

Narcisa A. Polonio, Ed.D.
Executive Vice President for Research, Education and Board Services

Colleen Allen
Director, Educational Services

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LEARNING WHILE EARNING:

How Low Income Working Learners Differ From All Other American College Students

ANTHONY P. CARNEVALE AND NICOLE SMITH

STUDY GUIDE

How many?

In the United States today, nearly 14 million people—8 percent of the total labor force and a consistent 70 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]

	At or below 200% of poverty	Above 200% of poverty	Total
Young Working Learner (16–29)	40% 3.7 million	60% 5.6 million	100% 9.3 million
Mature Working Learner (30–54)	46% 2.2 million	54% 2.5 million	100% 4.7 million
Total	6 million	8 million	14 million

Six million or 43 percent of all our working learners are poor—defined in this study as at or earning wages and salaries below 200 percent of the federal poverty line. More mature working learners are likely to be poor than young working learners. Forty-six percent of mature working learners are poor while between 40 to 45 percent of young working learners are poor.[2]

Where do they go for education and training?

Working learners, whether young or mature, are much more likely to be enrolled in community colleges. Almost half (46%) of young working learners attend community colleges, while 63 percent of mature working learners attend community colleges.

Dependent student's family income	<$32,000	$32,000–59,999	>=$60,000
Public 4-year	21%	25%	54%
Private not-for-profit 4-year*	20%	24%	57%
Private for-profit 2-year*	41%	27%	31%
Community Colleges	32%	29%	39%

Source: BPS:2009 Beginning Postsecondary Students
*Rows may not add up to 100 percent due to rounding

Once we divide by family income, the pattern of enrollment is skewed towards private for-profits and community colleges. One-third dependent community college students have family incomes below $32,000 per year. When compared to private not-for-profit schools, only one in five of dependent students have family incomes below $32,000. The family income make-up of community college is more likely to be on the lower side of the income distribution—an outcome that is very much correlated with the cost of attending.

How are low income working learners different?

Working learners who earn wages and salaries that fall below 200 percent of the federal poverty line face their own set of circumstances and obstacles that need be recognized for effective policy formation. For example, affluent parents might choose

not to pay for all of their children's college education, while most poor parents cannot contribute even if they wanted to do so. Many mature working learners are parents themselves who are now both financially responsible for their children's education as well as their own.

Low income working learners:

1. Are largely comprised of people of color, women, first-generation college-goers, and new residents/citizens for whom English may not be the primary language spoken in the home.
2. Have a much harder time earning a credential, even if they come from the upper end of the performance distribution.
3. Are less likely to attend selective four-year colleges and universities and more likely to attend for-profits.
4. Are less likely to enroll in Bachelor's degree programs and more likely to enroll in Associate degree and certificate programs.
5. Are much less likely to have access to financial safety nets, checking or savings accounts.
6. Are much more likely to choose credit cards over student loans to pay tuition and fees.
7. Are much more vulnerable to falling grades when hours worked exceed 40 hours per week.

What can we do to help?

1. Working learners need stronger ties between the worlds of work and 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. This connection is even more imperative for the low income student who must work while in college over the long-haul.
2. Specifically, community colleges need to include career counseling that incorporates knowledge of developed career pathways for students. Institutions should be held accountable for student outcomes beyond completion, especially as outcomes pertain to workforce development and long-term career goals.
3. 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 bodies. However, many states have recently embraced performance-based funding models, under which institutions are awarded a subset of funds for achieving outcomes measured by outcome standards set by policymakers. Policymakers should also hold institutions accountable for providing a quality education that leads to good jobs.
4. Policymakers should also invest in competency-based education programs that teach skills with labor market value. Mature students, in particular, frequently 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.

"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."

INTRODUCTION

Working learners (college students who are employed while enrolled) come from all walks of life. While paying tuition is a primary reason many students work, it is not the only reason.[3] College students also work because it's part of the culture in which they were raised, because their parents are unable to or choose not to wholly finance their education, or due to other preferences related to debt, financial independence, and lifestyle.[4]

Whether enrolled in more selective not-for-profit colleges, for-profits, community colleges or open access institutions, a student working upwards of 15–30 hours per week while enrolled in a postsecondary institution is the new normal.[5] However, for low income working learners balancing paying for college and work might not be all that new. In a previous report,[6] we examined the differences in completion rates, major selection, college selectivity, and life outcomes for young and mature working learners. We found that mature working learners were more likely to work full-time and be enrolled in shorter duration programs (two years or fewer) that might more easily facilitate the greater workload. Young working learners also worked long hours irrespective of their socioeconomic status, but were more likely to be enrolled in four-year institutions and engage in both paid and unpaid internships to gain work experience.

Low income students have different challenges. Other correlated socioeconomic status indicators, such as household income and parental education, are all very highly associated with student decisions, such as choice of college, level of degree, choice of program or amount of student loan debt.[7]

Over the last 25 years, more than 70 percent of college students have been working while enrolled in college. Each year, these 14 million college students face the challenge of balancing work, school and other life priorities.[8]

The average annual earnings of the enrolled undergraduate who had not yet completed a college degree was $16,000 in 2015, with a 29-hour work week.[9] Even when students are working, student loan debt continues to accrue for American college students. Rising college costs have contributed to the overall aggregate student loan debt, which is estimated at $1.3 trillion today. Working and paying off tuition and fees as you go is simply no longer a viable option for the majority of America's college students. A recent survey estimates that 71 percent of students at four-year colleges graduate with debt,[10] while roughly one in five students at two-year colleges graduate with debt. A disproportionate amount of student loan debt is owed by people with graduate degrees.[11]

Accumulated wealth for the average American is often tied to property, such as whether or not someone owns a home,[12] a car, or has retirement savings or health insurance. Accumulated wealth can also depend on accumulated household income and one's educational attainment level that affords one the opportunity to secure a high-paying middle-class job. The wealth divide among Americans has risen so dramatically since the 1980s,[13] that many college-age students are seriously contemplating whether or not even to go to college.

The impact of these wealth disparities on academic decisions often plays itself out in numerous ways related to the choice of institution, level of degree, choice of major, number of hours worked, and size of student loan. Even prior to the decision to pursue postsecondary education, access to financial resources can determine the overall score and to a lesser extent, the number of times a student takes standardized college entry tests.[14] Students of higher socioeconomic status may also have access to better resources to navigate the financial aid system and so are more prepared to pay for college by the time they enter. These accumulated financial disparities contribute to the divide in attendance patterns by class, above and beyond the preparedness metric.

"ROUGHLY ONE IN FIVE STUDENTS AT TWO-YEAR COLLEGES GRADUATE WITH DEBT."

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; while mature working learners are those aged 30–54.[15] 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.[16]

Among our nation's working learners, 43 percent are low income.

We further subdivide young and mature working learners based on their household income, dependency status and socioeconomic status, where available. Income is an important variable that can be useful in determining educational and workforce outcomes across different groups, as well as for identifying the types of working learners who might need additional support. Income can serve as a possible, though imperfect, proxy to help identify and differentiate between working learner groups that could be deemed to be "at-risk."[17] Dependency status can influence access to federal Pell grants and other financial aid tools and another important correlate of socioeconomic status.

Forty-three percent of all our working learners are poor. We find that slightly more mature working learners (46%) can be classified as poor than are young working learners (40%). This is partly due to the fact that many of our young working learners are still financially dependent on their parents' income, and until age 26, can still be included under their parents' health insurance plans. Mature working learners, who are now financially independent are much more likely to be parents themselves with lower incomes and less financial security—especially if still enrolled and completing a course of postsecondary education.

Low income working learners are less likely to have access to financial wealth-building channels.

Many college students invest in their college education by taking out student loans. Today more than ever, a college education is often connected to one's ability to access loans. Stark differences do exist along institutional lines in the amount that students take out and in the percentage of students by institutions who do borrow. Only 18 percent of community college students take out loans, compared to 73 percent of students from private for-profits, or half of students from public four-year institutions.[18]

By definition, low income working learners are marked by their financial status which implies an entire package of issues ranging from financial security to risk preference to the need to work more hours when working. These students are the least likely to have a checking account (one proxy for financial security), are most likely to use credit cards to pay for school, and the growing costs of college are quickly overburdening low income family budgets.

For working learners, access to a bank account and the associated financial security that these types of cushions provide, can mean the difference between getting to class on time and missing out on assignments and deadlines. The absence of a bank account or some type of financial cushion leaves individuals vulnerable to the vagaries of life, such as a flat tire or a sick child. These, in turn, have repercussions for completion and attainment.

"ONLY 18 PERCENT OF COMMUNITY COLLEGE STUDENTS TAKE OUT LOANS, COMPARED TO 73 PERCENT OF STUDENTS FROM PRIVATE FOR-PROFITS, OR HALF OF STUDENTS FROM PUBLIC FOUR-YEAR INSTITUTIONS.[18]"

"FOR WORKING LEARNERS, ACCESS TO A BANK ACCOUNT AND THE ASSOCIATED FINANCIAL SECURITY THAT THESE TYPES OF CUSHIONS PROVIDE, CAN MEAN THE DIFFERENCE BETWEEN GETTING TO CLASS ON TIME AND MISSING OUT ON ASSIGNMENTS AND DEADLINES."

TABLE 1. Among working learners, 6 percent do not have access to a checking or savings account while enrolled in college.

Bank accounts: had checking or savings account			
	No	Yes	Total
	(%)	(%)	
Estimates			
Total	**6%**	**94%**	**100%**
Income percent of poverty level			
100% or below	10%	90%	100%
101%–200%	7%	93%	100%
Above 200%	4%	96%	100%

Source: Georgetown University Center on Education and the Workforce analysis of U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12).

Working learners with incomes 100 percent or less of the national federal poverty level, are less likely to have a checking or savings account than their more financially better-off counterparts. Among working learners with incomes 100 percent of the federal poverty line or below, 10 percent do not have access to a bank account, a share nearly three times larger than for working learners with incomes above 200 percent of the federal poverty line, which is 6 percent.[19]

TABLE 2. 29 percent of working learners used credit cards to pay for college tuition and fees.

Credit cards: used credit cards to pay tuition and fees in 2011–12			
	No	Yes	Total
	(%)	(%)	
Estimates			
Total	**71%**	**29%**	**100%**
Hours worked per week			
1–15	78%	22%	100%
More than 15	69%	31%	100%

Source: Georgetown University Center on Education and the Workforce analysis of U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12).

Twenty-nine percent of working learners accessed credit cards to pay tuition and fees.[20] Working more, however, does not reduce the likelihood of using credit to pay tuition and fees. Twenty-two percent of working learners working 15 hours or less accessed credit cards to pay tuition compared to 31 percent of working learners working more than 15 hours per week.[21]

Low income students are relatively more risk averse when it comes to taking out loans.

Many working learners can no longer work their way through college to offset cost at most of America's postsecondary institutions.[22] In fact, community colleges and public four-year colleges might now very well be the last of the postsecondary institutions that can still facilitate the pay-as-you-go tuition option for working students. However, although tuition may seem more affordable and within reach, the data show that college students at public institutions also borrow to attend school, but in smaller amounts. Furthermore, though they borrow less, community college students struggle to repay even these relatively smaller levels of debt.[23]

In order for students to successfully traverse the increasingly complex domain of attaining postsecondary credentials in order to land a job or to upskill in a job that they currently have, they need to be very sophisticated and savvy about returns on investment in education and the economic value of their selected majors, both in the long-term and the short-term.

In 2012, 71 percent of our nation's four-year college students graduated with debt. In the aggregate, student loans have risen steadily from $240 billion in 2003 to $1.3 trillion today. The student loan burden faced by individuals is directly correlated with rising tuition and the proportionate increase in the cost of attending college. Part of the explanation for the rising cost of tuition has been the steady decline of state and federal allotments to higher education. Commensurate with the decline in state and federal funding, college tuition rates have increased by more than 13-fold since the 1980s.[24]

"[Students] need to be very sophisticated and savvy about returns on investment in education and the economic value of their selected majors, both in the long-term and the short-term."

According to the College Board, the average cost of tuition and fees for the 2015–2016 school year was:

- $32,405 at private four-year colleges;
- $23,893 for out-of-state students attending public universities;
- $15,610 for for-profit institutions;
- $9,410 for state residents at public four-year colleges and
- $3,435 for district residents at public two-year colleges.[25]

Furthermore, parents who have a college education, are much less risk averse to taking out loans to finance their children's education.[26] Compounding this positive relationship between family education and likelihood of borrowing, is the fact that highly educated families are more likely to access more selective colleges and universities with relatively higher costs to attend. The converse is also true. College students from low income backgrounds borrow less, attend less selective schools, and may be more exposed to default risk post-graduation.

Even federal Pell grants that were designed to defray the cost of college on the basis of needs for low income students has grown much more slowly than tuition costs. Federal Pell grants have not kept up with the cost of college. Seventy percent of Pell recipients also access student loans in order to complete college. Fifty-eight percent of first-time community college goers receive Pell grants.

On average, three in five mature working learners borrow to pay for postsecondary education costs. Mature working learners are about as likely to borrow to pay for postsecondary education costs as young, independent working learners aged 24 to 29. Mature working learners who do borrow are more likely to borrow larger amounts than young working learners. Roughly 1 in 5 (20%) mature working learners borrows in excess of $24,300, which is most similar to young, non-traditional (aged 24 to 29) independent working learners' borrowing patterns.

TABLE 3. **58 percent of community college students receive federal Pell grants. They account for 31 percent of the federal Pell grant recipients.**

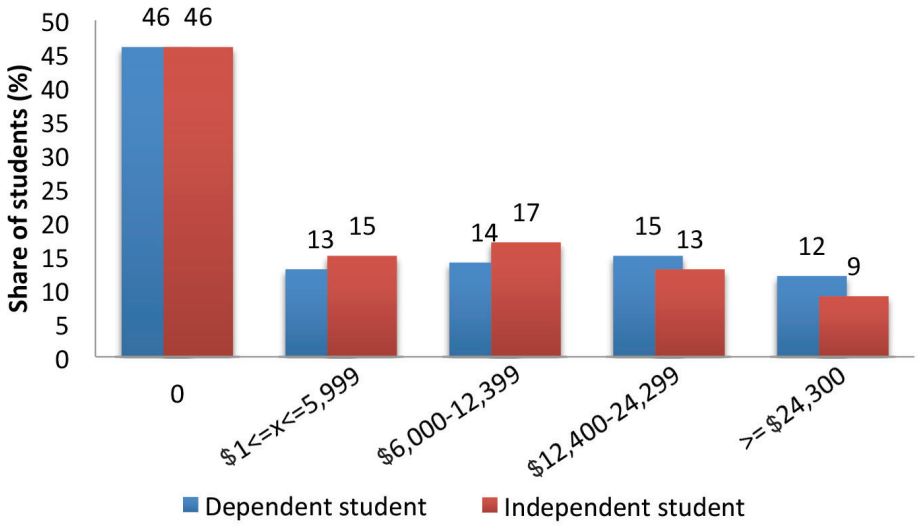
Type of institution	Percent of full-time, first-time undergraduate students awarded Pell grants	Distribution of Pell grants (%)
Public 2-year	58%	31%
Public 4-year	44%	36%
Private not-for-profit 2-year	64%	1%
Private not-for profit 4-year or above	44%	15%
Proprietary 2-year	74%	7%
Proprietary 4-year or above	72%	11%
Total	61%[27]	100% (8.9 million recipients)

Source: Georgetown University Center on Education and the Workforce analysis of 2013–2014 IPEDS data.

The likelihood of borrowing for college and the size of loans that student take out is also related to socioeconomic status.

Young independent working learners (aged 24 and older, or those that self-declare as independent[28] under the age of 24) take out smaller amounts of student loans when compared with their dependent counterparts.[29] Dependent working learners are more likely to borrow upwards of $12,400 than independent working learners. (See figure 1.)

FIGURE 1. **Independent working learners tend to borrow less for college.**



Source: Georgetown University Center on Education and the Workforce analysis of National Postsecondary Student Aid Study (NPSAS), NPSAS:12.

TABLE 4. **Institution type correlates more closely to incidence of loan default than size of loan.**

Type of institution	Cumulative amount borrowed for education as of 2012 ($)	Incidence of Loan default (%)[30]	Average salary 10 years after enrollment ($)
Public 2-year	$8,970	18.5%	$33,070
Public 4-year	$19,330	7.3%	$47,200
Private not-for-profit 2-year	$14,790	15.3%	$39,470
Private not-for profit 4-year or above	$26,000	6.5%	$47,630
Proprietary 2-year	$13,960	16.8%	$29,200
Proprietary 4-year or above	$22,300	14%	$39,520

Sources: Georgetown University Center on Education and the Workforce analysis of U.S. Department of Education, National Center for Education Statistics, 2003–04 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:04/09), 2009; U.S. Department of Education.[30] Official Default Rates for Schools, 2013; and U.S. Department of Education, College Scorecard Data, 2015.

The size of one's student loan is not necessarily related to the student's ability to repay or to their incidence of default. College students who take on debt but do not earn a degree face a relatively high risk of defaulting. Loan defaults are much more common among students who never earn a degree and therefore have reduced ability to repay.

Risk aversion to borrowing often works against the student. Trying to take out fewer loans by paying a larger share out-of-pocket from earnings can put additional pressure to work longer hours, thereby devoting less time to completion goals. This is especially true for low income students that face a confluence of concerns: working longer hours, taking out fewer loans, decreased likelihood of completion, decreased likelihood of job paying living wages, higher default rates.[31]

"TRYING TO TAKE OUT FEWER LOANS BY PAYING A LARGER SHARE OUT-OF-POCKET FROM EARNINGS CAN PUT ADDITIONAL PRESSURE TO WORK LONGER HOURS, THEREBY DEVOTING LESS TIME TO COMPLETION GOALS."

Grades fall more significantly for dependent students compared to independent students who work over 40 hours per week.

Using National Postsecondary Student Aid Study (NPSAS) data, we find that 61 percent of college students earned a GPA 3.0 or above when they worked 15 or fewer hours per week.

As the number of hours worked increased to over 15, the fraction of students earning a GPA 3.0 or above slowly declined. More than half of all young dependent working learners who work more than 15 hours per week have GPAs below 3.0. Fifteen hours per week therefore seems to be a threshold for working and GPA performance for dependent working learners.

TABLE 5. As hours worked increases, student GPA falls for dependent students.

Dependent students (Average GPA)			
		<3.0	>=3.0
Weekly Hours worked	1–15	39	61
	16–25	51	50
	26–39	55	45
	>=40	56	45

Source: Georgetown University Center on Education and the Workforce analysis of National Postsecondary Student Aid Study (NPSAS), NPSAS:12.

There are notable exceptions to the U-shaped relationship between hours worked and grades attained while in college. Some amount of working while enrolled can also have a positive impact on grades. Though independent students perform worse academically when they work longer hours, fewer independent students suffer declining grades compared to dependent working students, even when controlling for selectivity of institution. Using NPSAS data, some students that identify as independent are able to maintain high grades even when working over 40 hours per week.

TABLE 6. GPA is more likely to be less than 3.0 for students working larger number of hours, but for full-time independent students, working 40 hours or more, this relationship no longer holds.

Dependent students (Average GPA)			
		<3.0	>=3.0
Weekly Hours worked	1–15	39	61
	16–25	44	56
	26–39	46	54
	>=40	40	60

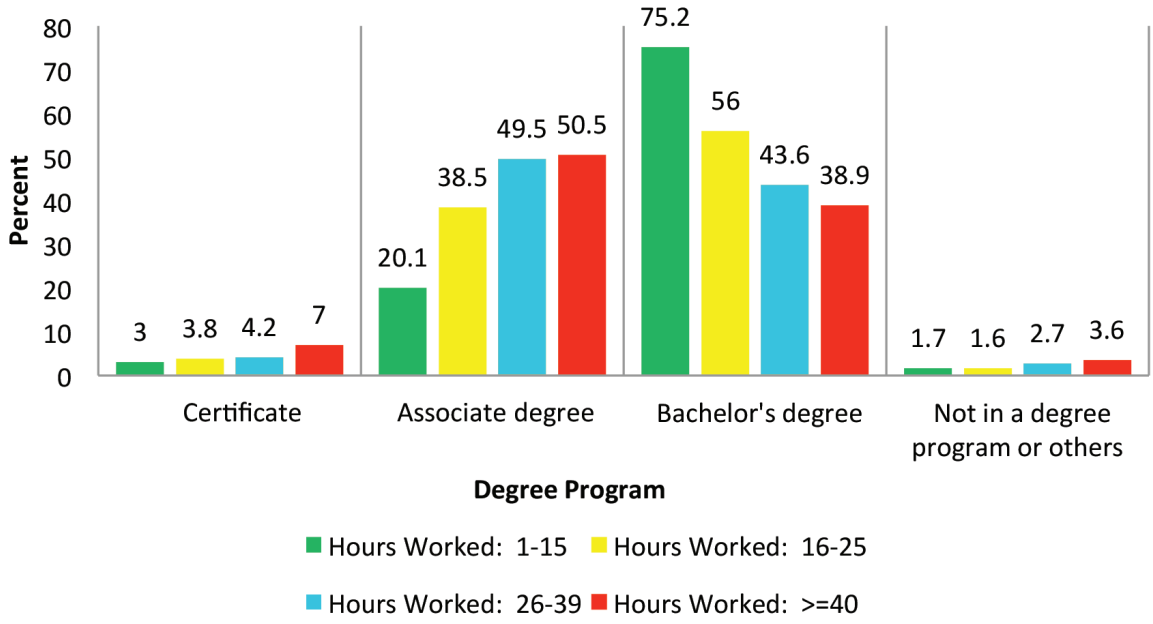
Source: Georgetown University Center on Education and the Workforce analysis of National Postsecondary Student Aid Study (NPSAS), NPSAS:12.

Regardless of the number of weekly hours worked, independent working learners are more likely to have GPAs above 3.0, and more likely to have GPAs above 3.5. As the number of weekly hours worked increases, the likelihood of having a GPA that falls between 2.5 and 2.99 increases for mature working learners. Dependent students are much more likely to have GPAs that fall below 3.0 as working hours increase to full-time employment when compared to independent students.

Low income working learners are less likely to enroll in Bachelor's degree programs and more likely to enroll in Associate degree and certificate programs.

For all working learners across all levels of poverty, working more hours per week decreases the likelihood of enrollment in a baccalaureate program. As shown in Figure 2, working the least (1–15) hours per week is most highly associated with students' enrollment in Bachelor's degree programs. As the hours of work increase, students are more likely to enroll in Associate degree and certificate programs.

FIGURE 2. Full-time students are much more likely to be enrolled in certificate or Associate programs than Bachelor's degree programs.



Source: Georgetown University Center on Education and the Workforce analysis of National Postsecondary Student Aid Study (NPSAS), NPSAS:12.

The number of hours worked by enrolled students, however, is also associated with socioeconomic status. When student's income level falls below 200 percent of the federal poverty line, the student is much more likely to work longer hours and to be enrolled in Associate degree or certificate programs, likely to accommodate their work schedule. Students who are low income, also tend to enroll in Associate degree and certificate programs in higher numbers compared to baccalaureate programs, regardless of the number of hours they work per week.

Low income young working learners are much more likely to enroll in Associate or certificate programs compared to working learners who are financially better off. The decision to enroll in an Associate degree or certificate program might even be the financially optimal solution for working learners because they can get a credential that is more relevant to their career goals in a shorter period of time.

> "FIFTEEN HOURS PER WEEK THEREFORE SEEMS TO BE A THRESHOLD FOR WORKING AND GPA PERFORMANCE FOR DEPENDENT WORKING LEARNERS.[32]"

"TWENTY-EIGHT PERCENT OF ASSOCIATE DEGREE-HOLDERS EARN MORE THAN SOME BACHELOR'S DEGREE-HOLDERS.[35]"

TABLE 7. **Low-performing high-socioeconomic status (SES) students are just as likely as high-performing low-SES students to complete an Associate degree or higher.**

	Math Achievement Quartiles			
Low SES/ Attainment 10 years from HS	1	2	3	4
BA+	5%	12%	23%	41%
Associate	7%	9%	9%	10%
Postsecondary certificate	14%	14%	11%	9%
Some college, no credential	36%	40%	37%	26%
High school diploma	28%	18%	17%	12%
High school dropout	11%	7%	4%	–
	101%	100%	101%	98%
	Math Achievement Quartiles			
High SES/Attainment 10 years from HS	1	2	3	4
BA+	21%	41%	61%	74%
Associate	7%	13%	8%	4%
Postsecondary certificate	17%	9%	5%	3%
Some college, no credential	36%	32%	23%	19%
High school diploma	14%	4%	3%	1%
High school dropout	4%	–	–	–
	99%	99%	100%	101%

Source: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), Base Year and Third Follow-up (2012).

The Bachelor's degree has for many years represented the gold standard of academic achievement. For many decades, simply having acquired a Bachelor's degree meant an automatic catapult to the middle class with an associated prestigious occupation and commensurate wages. In today's labor market, the sheepskin effect of the Bachelor's degree is slowly wearing off for certain fields. The move to credentialing, badges, stackable certificates, industry-based licenses and certifications is a material attempt by the market to try to document competencies acquired by individuals.[34] Twenty-eight percent of Associate degree-holders earn more than some Bachelor's degree-holders.[35] In turn, 39 percent of male certificate holders can earn more than the average Associate degree, while 24 percent of male certificate holders can earn more than the average baccalaureate degrees. The decision by many working learners to trade in the four-year BA degree for a two-year AA or a one-year certificate may indeed by a rational choice.

Despite our understanding of the irrefutable correlation between attainment and opportunity, the highest level of education attained is still very highly correlated with income and socioeconomic status. The Education Longitudinal study of 2002 recorded math and reading skills of a large nationally representative group of high school sophomores, and tracked them post-graduation from high school. Ten years later they found that low-socioeconomic status (SES) students across the board were much more likely to have dropped out of college. However, even the highest performing low-SES students were no better off in terms of postsecondary attainment than the lowest performing high-SES students. In other words, coming from a richer family trumps academic smarts if students are to complete postsecondary education in this country. The odds are stacked against low income students, whether or not they score in the top or bottom quartile of performance on math tests in high school.

Low income students, even if they come from the upper end of the performance distribution have a much harder time earning a credential.

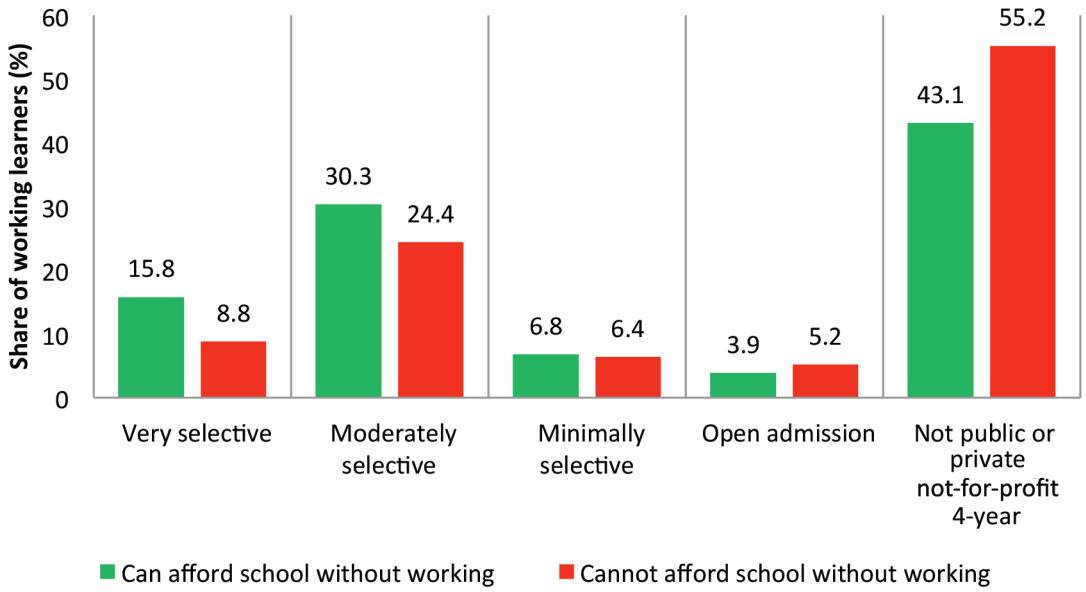
Low income students, even if they come from the upper end of the performance distribution have a much harder time earning a credential. Indeed, high income students with poor grades have better educational outcomes. Sixty percent of high performing low-SES students complete a postsecondary credential 10 years out of high school and compares almost equally to 63 percent of high-SES low-performing students who complete a credential. High-SES low-performing students are slightly more likely to complete a postsecondary credential than low income high-performing students 10 years out of high school. These results suggest that education alone as a means to upward mobility remains a false promise. In America, one's attainment level is still highly correlated with that of their parents.[37]

Low income working learners are less likely to attend selective four-year colleges and universities and more likely to attend for-profits.

Not only does attainment level matter in today's labor market, choice of field may matter more. The range of wages earned for college graduates with a Bachelor's degree in 2015 was between $36,000 and $136,000.[38] This disparity was very much associated with choice of major which in turn correlates to occupation and industry choices. The lowest median earnings for recent college graduates with Bachelor's degrees tend to be for those who are part of "intellectual and caring professions"[39]—that is, highly-educated workers whose earnings tend not to reflect their years of higher education.[40] The highest paying majors for baccalaureate degree-holders were in the Science, Technology, Engineering and Mathematics (STEM) professions, as well as some managerial and healthcare professional fields.[41]

"FEDERAL AND STATE FUNDING PROCEDURES THAT ARE NOW INCREASINGLY ASSOCIATED WITH WORKFORCE PERFORMANCE INDICATORS ACT AS A CARROT/STICK APPROACH TO IMPROVING WORKFORCE AND CURRICULAR ALIGNMENT FOR MANY PUBLIC INSTITUTIONS."

FIGURE 3. **Poor working learners are less likely to enroll in selective 4-year institutions and more likely to enroll in 2-year (or less) schools.**



Source: Georgetown University Center on Education and the Workforce analysis of National Postsecondary Student Aid Study (NPSAS), NPSAS:12.

The range of wages earned for recent college graduates with an Associate degree in 2015 was between $30,000 and $64,000.[42] Within Associate degrees as well, there is a clear bias towards scientific competencies, such as STEM credentials, but also for career and technical fields.[43]

Low income young working learners, with incomes less than 200 percent of the poverty level, are much less likely to enroll in selective postsecondary institutions than their more financially advantaged counterparts.[44] Low income young working learners, who earn less than 200 percent of the federal poverty line, are much more likely to enroll in for-profit postsecondary institutions than their more financially advantaged counterparts. Community colleges and for-profits are our nation's career institutions. Programs that make students more career-ready must simultaneously ensure that these careers pay a living wage. Federal and state funding procedures that are now increasingly associated with workforce performance indicators act as a carrot/stick approach to improving workforce and curricular alignment for many public institutions.

Mature working learners who work 1 to 15 hours, or 40 or more hours each week, are more likely to enroll in Bachelor's degree programs. Likewise, low income mature working learners with incomes between 101 and 200 percent of poverty level are more likely to enroll in Associate degree programs, while mature working learners who earn less than 100 percent of poverty are more likely to enroll in certificate programs.

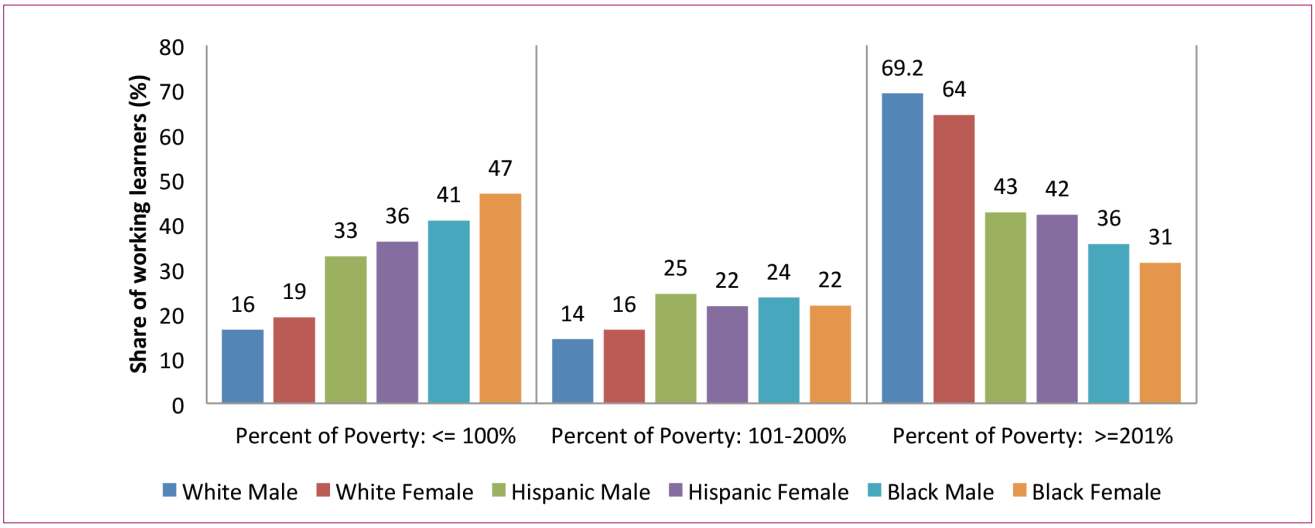
On average, ironically the most low income mature working learners are the most likely to enroll in for-profit institutions. As the number of weekly hours worked increases, the likelihood of for-profit enrollment increases for all poverty levels, with low income mature working learners having a lower likelihood of on-time completion.

Working learners of Black/African American or Hispanic/Latino descent are more likely to be financially disadvantaged.

Working learners who are Black/African American or Hispanic/Latino are more likely to be economically disadvantaged, when compared to white working learners. Working learners who are Hispanic/Latino, on average are the most financially disadvantaged, and the least likely of all racial/ethnic subgroups to have incomes above poverty levels, while working a 40-hour week.

Black/African American and Hispanic/Latino working learners are more likely to earn incomes below 100 percent of poverty. Women working learners have greater incidence of poverty across all races/ethnicities.

FIGURE 4. Hispanic/Latino and Black/African American working learners have a higher chance of still earning below 100 percent of the federal poverty line.



Source: Georgetown University Center on Education and the Workforce analysis of National Postsecondary Student Aid Study (NPSAS), NPSAS:12.
*Totals may not add to 100 percent due to rounding.

Regardless of race/ethnicity, men who work full-time are much more likely to have income above 200 percent of poverty level than women. Hispanic/Latina women who work 40 hours or more per week, however, are least likely to have incomes above 200 percent of poverty level.

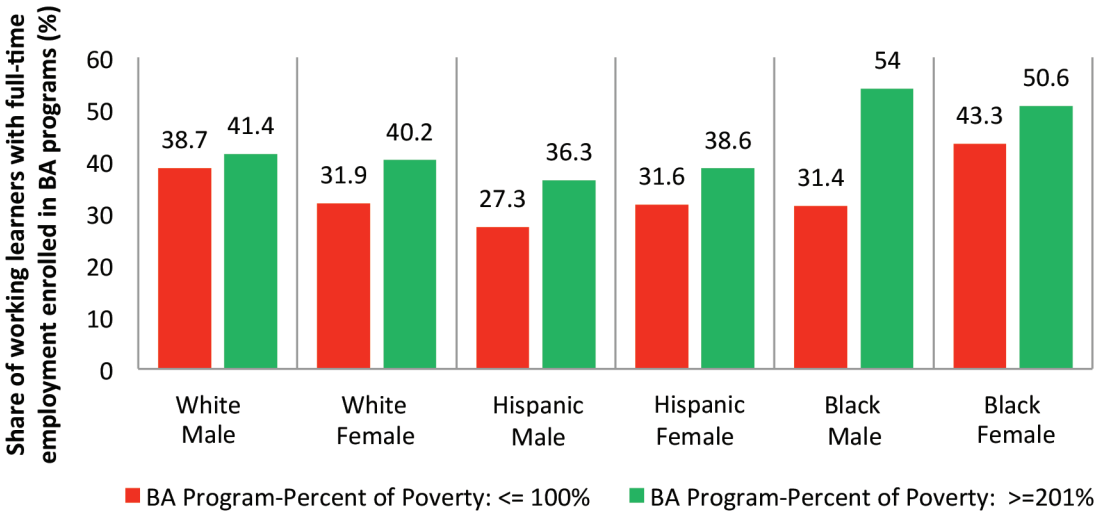
Low income Black/African American and Hispanic/Latinos are less likely to enroll in a Bachelor's degree program.

For all working learners, working more hours per week decreases the likelihood of their enrollment in a Bachelor's program. The patterns by race/ethnicity are very consistent with this fact as a whole, but once we subdivide by sex, we observe some differences in enrollment decisions.

Among those who work 1–15 hours per week, working learners who are Black/African American or Hispanic/Latino are less likely to enroll in baccalaureate programs than their white peers. By the time we get to 15 to 40 hours per week, there are no significant differences in enrollment patterns in baccalaureate programs for men by race and ethnicity. Working over 40 hours per week, however, produces different results for Black/African American or Hispanic/Latino men. Hispanic/Latino men who work 40 or more hours per week are much less likely to enroll in a Bachelor's degree program, while Black/African American men who work 40 or more hours per week are more likely to enroll in baccalaureate programs.

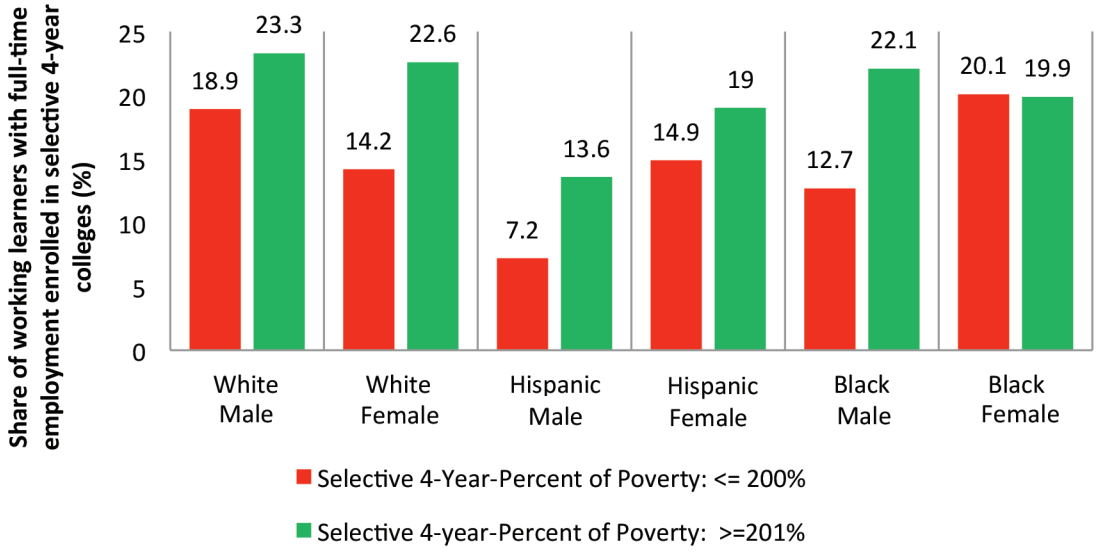
For women, working full-time does not necessarily preclude them from enrolling in a baccalaureate program as it did for Hispanic/Latino men. Black/African American women who work 40 or more hours per week are comparatively most likely to enroll in Bachelor's programs—a similar result to that observed for Black/African American men who work 40 or more hours per week.

FIGURE 5. At 40 hours per week worked, Black/African American men and women are very likely to enroll in baccalaureate programs.



Source: Georgetown University Center on Education and the Workforce analysis of National Postsecondary Student Aid Study (NPSAS), NPSAS:12.

FIGURE 6. At 40 hours per week worked, Hispanic/Latino and Black/African American men are least likely to attend selective colleges.

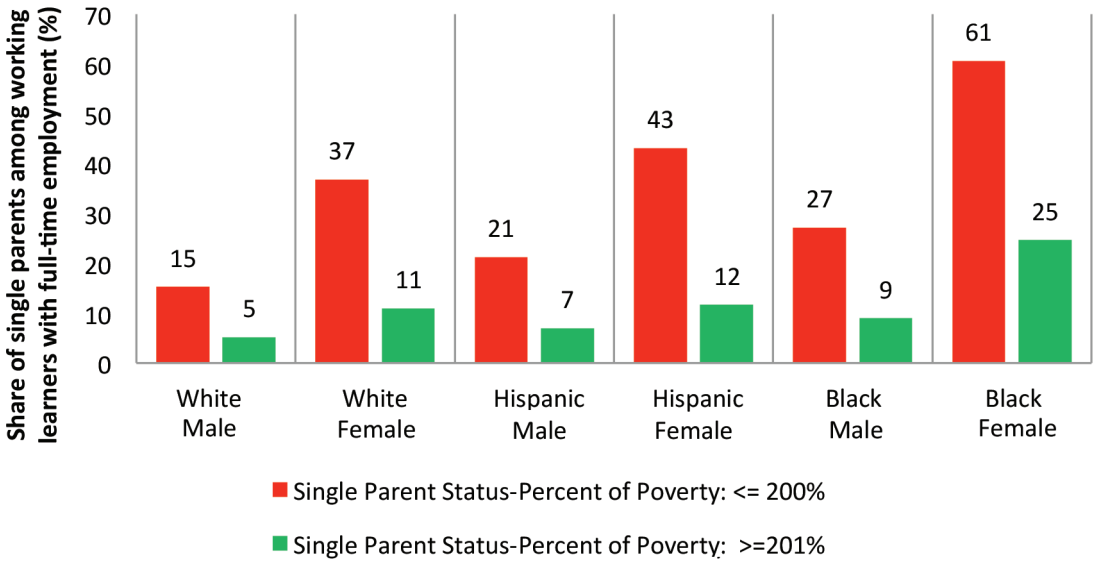


Source: Georgetown University Center on Education and the Workforce analysis of National Postsecondary Student Aid Study (NPSAS), NPSAS:12.

The likelihood of enrollment in a selective four-year college or university decreases with poverty level, especially for Black/African American and Hispanic/Latino college students.

For all working learners, working more hours per week decreases the likelihood of enrollment in a selective four-year institution.

FIGURE 7. Single parents are more likely to work 40 hours or more a week.



Source: Georgetown University Center on Education and the Workforce analysis of National Postsecondary Student Aid Study (NPSAS), NPSAS:12.

Decisions regarding level attained and degree chosen differ when working learners are parents themselves.

Mature working learners who have dependents to care for are less likely to enroll in Bachelor's degree programs.[45] This occurrence is likely due to a number of factors including time constraints, access to medical benefits, wages, and access to affordable childcare.

SUMMARY AND CONCLUSIONS

This study finds that nearly half of all young working learners (45%) earn low wages[46] that place them at or below 200 percent of the federal poverty line.[47] About 40 percent of mature working learners face similar economic circumstances which gives us a grand total of 42 percent of America's college students who are working poor students. These students face their own set of circumstances and obstacles that need be recognized for effective policy formation: affluent parents might choose not to pay for all of their children's college education and most poor parents can't contribute even if they wanted to do so.

Low income working learners have different fall back positions, different understandings of risk, and different understandings of how to leverage debt. Even the impact of hours worked on GPA is more strongly felt among low income working learners. Grades fall more significantly for dependent students compared to independent students who work over 40 hours per week.

Low income working learners are largely comprised of people of color, women, first-generation college-goers, and new residents/citizens for whom English may not be the primary language spoken in the home. Individuals who belong to the majority group —such as white men—may be less frequently described as disadvantaged; however, many—for example, those who live in rural communities, and predominantly those from

"THOSE WHO LIVE IN RURAL COMMUNITIES, AND PREDOMINANTLY THOSE FROM RURAL COMMUNITIES IN THE SOUTH—EXPERIENCE A NUMBER OF SITUATIONAL DISADVANTAGES AND ALSO HAVE TO WORK FULL-TIME TO COVER THE COSTS OF ATTENDING COLLEGE."

rural communities in the South—experience a number of situational disadvantages and also have to work full-time to cover the costs of attending college.

Working learners from low income backgrounds face challenges in accessing and completing academic credentials, as well as in using these credentials to obtain good-paying jobs. It has been well established in the literature that lower socioeconomic status is highly associated with relatively lower levels of educational attainment, completion and learning outcomes for our college students.[48,49,50]

Working learners from low income backgrounds are also more likely to work full-time and therefore have less available time to concentrate on academic concerns. Poverty is associated with a relatively longer work-week among students in general. There is some evidence that working too much—over 15 to 20 hours per week—while enrolled in a postsecondary program hurts one's chances of completion.[51] But sometimes, working longer hours is associated with better grades. This might be due to better time-management and discipline on the part of the working learner to get both academic and work related activities completed in an efficient manner.

Make Relavant Career Pathways

Working learners from low income backgrounds are more likely to attend under-resourced institutions, open access schools, community colleges and for-profits.[52] Therefore, if we associate students from low income backgrounds with low completion rates and generally suboptimal outcomes, it is not clear that these consequences are due to working more or to other significant correlates such as having access to fewer educational and support services, poor relevance of studies to career, or other noneconomic and economic barriers associated with socioeconomic status.

Access to savings or credit cards also serve as a good indicator of socioeconomic status and by extension persistence in a postsecondary institution. Ten percent of low income working learners did not have access to a checking or savings account while enrolled in college compared to 4 percent for working learners with incomes above 200 percent of the federal poverty line.[53] Thirty-one percent of working learners who were already working over 15 hours per week still used credit cards to pay for college tuition and fees.

Low income working learners deserve additional attention, especially as it pertains to policy considerations and programmatic interventions.

There is no unique and proven solution to the problems we have identified. However, early career counseling and career development advising are key takeaways from an education cohort that is much more likely to enroll in shorter term, career-oriented programs of study. Students' social and cultural capital can affect their educational decisions and long-term career outcomes. Career counselors must, therefore, be culturally sensitive in recognizing differences in financial choice sets for low income students as well as understanding the effects of asymmetric information in education and career outcomes. Finally, community colleges need to constantly engage low income working learners to provide effective mentoring on career pathway development, as well as provide financial assistance and financial advising for those that need it.

APPENDIX 1 Methodology Used in Defining Dependency

- **Filter 1-Dependency.** Three Categories: Dependents, Independents, and Independents with Dependents. Parameters: "Dependents"- younger than 24; "Independents"- aged 16 to 29; "Independents with Dependents"- aged 16 to 29 and a parent of a dependent. Dependency was chosen as an important determinant of disadvantage because dependency status was identified as an indicator of whether the working learner had access to supplemental financial or resource-providing support systems in the original report. Even in the absence of financial support, having access to a family support system could be an important and significant safety net for students who are employed because of the stability it might provide. Young working learners between the ages of 16 and 24 who would otherwise qualify as dependents, but who identify as independents, likely lack this crucial aspect of support and may be disproportionately disadvantaged. Being a young parent while enrolled in a postsecondary program and working is also likely associated with a disproportionate level of disadvantage because of the additional time and financial responsibilities required by this group of working learners.

- **Filter 2-Percent of Poverty.** Three Categories: "0–100 percent," "101–200 percent," and ">200 percent." Working learners with incomes at or below 200 percent of poverty are defined as being "low income." Percent of poverty is an indicator of the relative financial well-being of working learners, and associated with postsecondary outcomes. Aside from dependent young working learners, whose financial status is determined by the associated financial status of parents or guardians, poverty level and hours worked are inversely related. That is to say, as weekly hours worked increase, income as percent of poverty should increase. In order to control for this effect, this report observes weekly hours worked across both low income (at or below 200 percent of the poverty line) and moderate-to-high income (at or above 201 percent of the poverty line). In some cases, such as measuring GPA, percent of poverty is observed across additional levels of stratification, e.g. from 0 to 100 percent of poverty, 101 to 200 percent of poverty, and above 200 percent of poverty, in order to parse out more sophisticated associations.

- **Filter 3-Weekly Hours Worked.** Four Categories: "1 to 15 hours," "16 to 25 hours," "26 to 39 hours," and "40 or more hours." Each category represents the number of weekly hours worked. Previous studies have indicated that working too much while enrolled in college can result in adverse outcomes for working learners, on average (Pascarella, et al., 1998; Titus, 2006; Minnesota Private College Council analysis of National Postsecondary Student Aid Study, 2007–08). This report examines weekly hours worked to identify disadvantage by hours worked for working learners.

- **Filter 4-Age: Four Categories.** "18 and Younger," "19 to 23," "24 to 29," and "30 to 54." As previously described, "Young Working Learners" are between the ages of 16 and 29, while "Mature Working Learners" are between the ages of 30 and 54. Age was shown to have been an important determinant of disadvantage, as young working learners experience a higher likelihood of being low income while enrolled in college.

- **Filters 5 and 6-Race/Ethnicity.** Five Categories: "Black/African American," "Hispanic/Latino," "white," "female," and "male." Women and minorities have been identified as being disproportionately disadvantaged with regard to education and labor force outcomes. This report explored associations between gender, race, and educational outcomes in order to better identify what disparities may exist across various demographic groups.

ENDNOTES

1 These programs include degree-granting programs, such as Associate and Bachelor's degree programs, non-degree granting programs, and certification and vocational training programs.

2 45 percent of young working learners are poor as defined by the population in the Add Health dataset and 40 percent are poor if defined by data in Beginning Postsecondary Students survey.

3 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 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. College cost is an important but not exclusive reason why students work. While rising college costs relative to family income and student financial assistance contributes the number of students working, it does not by itself account for the entire rise in employment among students. 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 Tanaka, 1991). The 'rising cost of college' thesis also does not account for the fact that employment among part-time students has held relatively 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, 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 percent) who receive aid and borrow still work full time (Horn and Malizio, 1998). While working learners undoubtedly use employment to finance their education, paying for college should be seen as one of many overlapping reasons for the incidence and prevalence of working learners. Student employment—like employment in general—is a complex economic, social, and personal decision that students make for a variety of reasons. Therefore, working learners should be understood as being motivated to work for a variety of reasons.

4 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, 2006). Although they admit that this is an untested hypothesis (1991). Perna et al.'s last perspective is a demographic one; as 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.'

5 Davis, 2012. *School enrollment and work status*.

6 Carnevale et. al. 2015. *Learning while Earning.*

7 Students from more privileged backgrounds often have access to resources that allow them to better take advantage of existing financial options, thereby minimizing exposure to onerous student loans.

8 Carnevale et. al. 2015. *Learning while Earning*.

9 Georgetown University Center on Education and the Workforce analysis of pooled American Community Survey data, 2009–2015.

10 The institute for college and student access, March 2014. http://ticas.org/sites/default/files/pub_files/Debt_Facts_and_Sources.pdf

11 DeLisle 2014. The graduate student debt review. Graduate students disproportionately shoulder the burden. Close to 40 percent of the 1.3 trillion-dollar debt is owed by graduate school students who are just over 14 percent of students overall.

12 In 2011, approximately 30 percent of household wealth was held in home equity according to the Census Bureau. Gottschalck, Alfred, et. al. March 2013. Household Wealth in the U.S.: 2000 to 2011. U.S. Census Bureau.

13 Sullivan et. al. (2015) *The Racial Wealth Gap*. Using Survey of Income and Program Participation (SIPP) data, this study found that the average white household in 2011 had accumulated wealth that was 13 times that of the average African American household and 10 times that of the average Hispanic household.

14 Sackett et. al. (2009). *Socioeconomic Status and the Relationship Between the SAT and Freshman GPA: An Analysis of Data from 41 Colleges and Universities*.

15 Where the data supports 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.

16 A different age grouping may have consequences for how the data looks; for example, the 18-20-year-old cohort behaves differently from the 18-29-year-old cohort because of the average differences in interests and behavior that naturally arise as people age and mature. While recognizing that every age group is variably heterogeneous, regardless of the parameters used, we nonetheless decided to minimize the number of groups studied to provide easily understandable, interpretable, and qualitatively accurate categorizations of working learners.

17 We categorize those whose annual earnings place them at 200 percent of the poverty line and below as "low income young working learners." We are particularly interested in the low income young

working learners sub-population because the choices that this group makes—including selection of undergraduate majors and selection into future occupations- along with associated labor market outcomes—are important in assessing whether, and to what extent, education has been an important tool for lifting these and similarly disadvantaged groups out of poverty. Moreover, we want to know if there are significant differences between low income Young working learners and Young working learners in terms of their institutional selection processes, their patterns of enrollment or employment, and their labor market outcomes, and whether those differences, on average, lead to long-term differences in their life outcomes. We are also curious about whether these differences vary by enrollment age for disadvantaged mature working learners when compared to mature working learners.

18 Georgetown University Center on Education and the Workforce Analysis of U.S. Department of Education, National Center for Education Statistics. 2011–12 National Postsecondary Student Aid Study (NPSAS:12).

19 Georgetown University Center on Education and the Workforce analysis of U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12).

20 Ibid

21 Ibid

22 For community colleges, affordability still remains a major goal. Due the lower costs of attending, between 17 and 21 percent of community college students borrow from federal loan programs. (http://ticas.org/sites/default/files/pub_files/states_of_denial.pdf). Graduation rates, however, remain a challenge and are still low (estimated at 36 percent from the National Student Clearing House (https://nscresearchcenter.org/wp-content/uploads/SignatureReport8.pdf). What this means is there are greater long-term consequences for students that who take out a loan to attend college and do not complete.

23 Campbell and Hillman, *A Closer Look at the Trillion,* 2015.

24 Bloomberg analysis of Bureau of Labor statistics data.

25 College Board, *Trends in College Pricing*, 2015.

26 Cha et. al. *Parental Borrowing for Dependent Children's Higher Education,* 2005.

27 The share of students receiving Pell grants is lower for all postsecondary students (not just first-time, full-time).

28 Close to 35 percent of American college students registered in both public and private colleges and universities have identified as independent.

29 Georgetown University Center on Education and the Workforce analysis of National Postsecondary Student Aid Study (NPSAS), NPSAS:12.

30 US Department of Education, 2013. http://www2.ed.gov/offices/OSFAP/defaultmanagement/cdr.html.

31 Houle (2013), Disparities in Debt.

32 Kalenkoski, C and Sabrina Pabilonia (2008) using NLSY data suggest that 20 hours may be the more appropriate threshold.

33 Gleason, 1993. College student employment, academic progress, and post-college labor market success.

34 Carnevale, *Career and Technical Education: Five ways that pay along the way to the BA,* 2012.

35 Carnevale et. al., The College Payoff, 2011.

36 Carnevale et. al, Certificates, 2012.

37 OECD, *A Family Affair*, 2010

38 Carnevale et al., *What's It Worth*, 2015.

39 Some examples of intellectual and caring professions with low median wages include: Early Childhood Education, Human Services Area, Ethnic, and Community and Civilization, Organization Studies, Family and Consumer SciencesDrama and Theater Arts, Miscellaneous Industrial Arts and Consumer Services, Social Work, Physical Fitness, Parks, Recreation, and Leisure, Theology and Religious Vocations, Philosophy and Religious Studies.

40 Carnevale et al., *What's It Worth,* 2011.

41 Carnevale et al., *What's It Worth,* 2011.

42 Carnevale et. al., *The College Payoff,* 2011.

43 Carnevale, Career and Technical Education: *Five ways that pay along the way to the BA,* 2012.

44 "Selectivity" here is defined by a survey institutional rating of either "Very Selective" or "Moderately Selective."

45 Carnevale et. al. 2015. Learning while Earning. https://cew.georgetown.edu/cew-reports/workinglearners/.

46 Author's analysis of data from The National Longitudinal Study of Adolescent to Adult Health (Add Health).

47 The federal poverty line for an individual in 2016 is $11,880.

48 Ferguson et. al. 2007. *The impact of poverty on educational outcomes for children.*

49 Turkheimer et al (2003). *Socioeconomic Status Modifies Heritability of IQ in Young Children.*

50 Perry, L. B., & McConney, A. (2010). Does the SES of the school matter? *An examination of socioeconomic status and student achievement using PISA* 2003.

51 Pike et. al. 2008. Elling and Elling 2000. Light 2001. Hood et. al. 1992. Steinberg and Dornbusch, 1991.

52 Carnevale and Strohl, 2013.

53 Georgetown University Center on Education and the Workforce analysis of U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Study (NPSAS:12).

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ABOUT THE AUTHORS

Anthony P. Carnevale

Dr. Carnevale currently serves as research professor and director of the Georgetown University Center on Education and the Workforce, a position he has held since the Center was created in 2008. He has served as vice president of the Educational Testing Service (ETS), senior staff in both the U. S. Senate and House, and has received appointments in multiple presidential administrations. In 1993 he was appointed by President Bill Clinton to chair the National Commission on Employment Policy. He was subsequently appointed by President George W. Bush to serve on the White House Commission on Technology and Adult Education. Dr. Carnevale co-authored the principal affidavit in Rodriguez v. San Antonio, a U.S. Supreme Court action to remedy unequal education benefits. This landmark case resulted in significant fiscal reforms to equalize K–12 education spending in a majority of states.

Nicole Smith

Dr. Smith is researcher professor and chief economist at Georgetown University, Center on Education and the Workforce (DC). Smith leads the Center's econometric and methodological work. Smith has developed a framework for restructuring long-term occupational and educational projections. This framework forms the underlying methodology for *Help Wanted*, a report that projects education demand for occupations in the U.S. economy through 2020. She is part of a team of economists working on a project to map, forecast and monitor human capital development and career pathways.

Smith was born in Trinidad and Tobago and graduated with honors in economics and mathematics from the University of the West Indies (U.W.I.). She was the recipient of the Sir Arthur Lewis Memorial Prize for outstanding research at the master's level at the U.W.I. and is co-recipient of the 2007 Arrow Prize for Junior Economists for educational mobility research. She received her Ph.D. in economics from American University in Washington, D.C.

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