

ppi radically.
pragmatic

Forget “free college.” How about “free credentials?”

Anne Kim
October 2017



Forget “free college.” How about “free credentials”?

OCTOBER 2017

Anne Kim

A four-year degree is not the only path to middle-class security. High-quality occupational credentialing opportunities deserve equal standing and federal support.

Many progressives believe “free college” to be the best way of helping more Americans achieve economic mobility and security. On average, workers with four-year degrees enjoy greater earnings and job security than high school graduates,¹ and it’s axiomatic that most future jobs will require some sort of postsecondary education.² Free college, the logic goes, would ensure that more Americans share in the fruits of an economy where skills are increasingly at a premium.

This desire to tackle what many see as a root cause of growing inequality was a big reason “free college” figured so prominently in the presidential campaigns of both Democrats Hillary Clinton and Bernie Sanders in 2016. No doubt the idea will re-emerge in 2020.

But the single-minded focus on college diminishes other, equally viable paths to middle-class security – such as in health care, information technology, advanced manufacturing and other skilled professions – that require specialized occupational “credentials” but no four-year degree.

Current higher education policy is heavily tilted toward a monolithic view of postsecondary education – as a single block of time in the life of a young adult between the ages of 18 and 22 with a four-year degree as the optimal outcome. It’s a framework that fails to acknowledge the needs of both students and employers in today’s rapidly changing economy. And it sends the wrong message to the millions of Americans who opt out of college – not because they can’t afford it but don’t want it or need it to achieve their aspirations. As pollster Pete Brodnitz of Expedition Strategies puts it, insisting on college as the ideal path is “essentially telling people they have the wrong dream.” “A lot of people want jobs that involve trades or skills,” says Brodnitz, “not a liberal arts education.”³

If progressives truly want to expand opportunity, they should reverse the lopsided bias toward college, both in politics and in policy, rather than reinforcing it. In particular, federal and state policymakers should embrace the role that high-quality, short-term credentialing programs can play in boosting workers’ skills and wages.

THE PLAN

- Extend student aid, including federal Pell grants, to high-quality credentialing programs.
- Provide students with standardized information on the quality and value of credentialing options.
- Pay for it all with a modest new excise tax on elite university endowments.

CURRENT STUDENT AID POLICY NEGLECTS THE VALUE OF OCCUPATIONAL CREDENTIALING.

At a banquet hall in rural Halifax County, Virginia, earlier this summer, 47 graduates walked the stage for their friends and family at a ceremony sponsored by the Southern Virginia Higher Education Center (SVHEC).

The students weren’t getting college diplomas but something just as valuable in this former tobacco and manufacturing region: industry-recognized “credentials” in fields where local companies were looking for talent.

More than half the students had completed SVHEC’s “IT Academy,” while others had earned credentials in fields such as “mechatronics,” an amalgam of mechanical engineering and electronics. Eight students became certified welders, including the center’s first female welding student, Tara Bailey.⁴

According to officials at SVHEC, one of five state-funded higher education agencies, many of the center’s graduates have gone on to well-paying jobs, such as at the massive Microsoft data center in Boydton, Virginia, which recently experienced its fifth expansion.⁵ Mechatronics and welding graduates are now technicians at local machine and fabrication shops, or at manufacturers such as Presto Products, a division of Reynolds, in South Boston, Virginia; and Sunshine Mills, a major pet food manufacturer in Halifax. For a number of these students, said Nettie Simon-Owens, Chief Economic Advancement Officer at SVHEC, earning these credentials has opened doors that once were closed. “In many instances, we’re taking people who were unemployed and maybe receiving public assistance to becoming taxpaying members of the community,” she said.

Many of SVHEC’s graduates have gone on to well-paying jobs.

Putting students on the path to good jobs with good wages is one reason the federal government invests so much in higher education — and in student financial aid in particular. According to the Pew Charitable Trusts, the federal government spends nearly \$80 billion a year in grants and tax breaks to support the cost of postsecondary education.⁶

Yet not one penny of direct federal aid helps the students at SVHEC or at most other workforce credentialing programs, despite the well-paying jobs students can get from high-quality credentials and the rigor of study needed to earn them. Under current federal law,⁷ short-term, non-college-credit workforce training programs like the ones at SVHEC cannot get support from the federal Pell Grant program, which provided \$28.2 billion in aid to low-income students in 2015-16.⁸ It’s a policy that makes increasingly little sense, given the value of credentials to both workers and industries.

Under current federal law, short-term, non-college-credit workforce training programs like the ones at SVHEC cannot get support from the federal Pell Grant program.

In a growing number of fields — such as construction and the building trades, advanced manufacturing, and information technology — industry-recognized credentials have become a valuable way for workers to demonstrate their mastery of specific, in-demand skills. In advanced manufacturing, for example, workers specializing in metalworking can earn up to 52 “stackable” credentials from the National Institute for Metalworking Skills from entry-

level to master.⁹ In IT, certifications issued by standards setting bodies such as CompTIA are now prerequisites for computer professionals.¹⁰

As Brent Weil, Senior Vice President of the Manufacturing Institute, told the Washington Monthly in 2013, “In some cases, employers prefer certification over a two-year degree” because of the precision that credentials can provide about a particular worker’s skills and knowledge.¹¹ And, in one study cited by the National Skills Coalition, “Individuals who held certifications in technical fields actually had stronger earnings and employment outcomes than individuals holding an Associate of Arts (AA) degree.”¹² The attractiveness and marketability of credentials might be one reason certificates now make up as much as a quarter of all postsecondary awards, compared to just 6 percent in 1980.¹³

Many of the jobs that require a credential but no college degree — so called “middle skill” jobs — pay salaries that can comfortably put workers into the middle class. An IT worker with entry-level certifications, for example, can expect to earn \$18 to \$25 an hour,¹⁴ with the potential to move up quickly. Certified welders can earn as much as \$62,100 a year, according to the Bureau of Labor Statistics,¹⁵ while electricians made a median of \$52,720 in 2016 and can earn as much as \$90,420.¹⁶ Many graduates with bachelor’s degrees — depending on their majors — in fact, will not earn comparable pay.¹⁷

Many of the jobs that require a credential but no college degree — so called “middle skill” jobs — pay salaries that can comfortably put workers into the middle class.

Data such as these show that high-quality credentialing efforts are worthy of greater federal investment and attention than they currently now get.

Quality credentialing programs can be a valuable postsecondary alternative for older and nontraditional students for whom a commitment to full-time or part-time coursework in a traditional college setting may be unrealistic, impractical, or unnecessary. And because they typically take weeks or months to earn, not years, credentials can help workers who've been displaced rapidly redeploy themselves into new careers with demonstrated employer demand.

Supporting credential attainment can also help close the so-called “skills gap.” While “middle skill” jobs are the backbone of the U.S. job market, making up 53 percent of all jobs in 2015 according to the National Skills Coalition,¹⁸ they are also the jobs employers are having the hardest time filling. As PPI Senior Fellow Harry Holzer writes, one reason is the lack of strong workforce development and training programs at the sub-baccalaureate level, a deficiency that's due in part to a deficit of government support.¹⁹

Some liberals might be leery of reviving the bad old days of “vo-tech,” when low-income and minority students were “tracked” into lesser fields, but the salaries and opportunities for advancement now afforded by credentialing give the lie to those fears. Rather, the bigger concern for progressives should be the mountains of student debt that disproportionately burden minorities and poor students,²⁰ who are also more likely to attend high-priced, lower-quality for-profit institutions²¹ and less likely to graduate.²²

FEDERAL PELL GRANTS SHOULD BE AVAILABLE FOR HIGH-QUALITY CREDENTIALING PROGRAMS FOR IN-DEMAND CAREERS.

Policymakers should expand the federal Pell Grant program to quality credentialing programs in high-demand fields. Creating a so-called “workforce Pell” could dramatically expand access to valuable occupational training opportunities, especially for workers with fewer financial resources.

While short-term credentialing programs are generally cheaper than two or four years of college tuition, the costs of earning a credential can still be burdensome for low-income students or workers who are unemployed, underemployed or displaced. At SVHEC, for example, the center's 11-week IT Academy costs \$2,700, while the entry-level welding program costs \$2,205 and mechatronics \$4,500. (In contrast, one year's tuition and fees averaged \$3,520 at public two-year schools in 2016-2017 and \$9,650 at public four-year institutions.²³)

Non-college-credit job training programs are currently ineligible for Pell Grant support unless they involve a minimum of 600 “clock hours” of instruction over a period of at least 15 weeks.²⁴ While perhaps intended to ensure that Pell funds go only toward serious programs of study, versus to fly-by-night institutions or credentials of dubious worth (like those correspondence courses for auto repair hawked by Sally Struthers on late-night TV), this requirement excludes many excellent credentialing programs of shorter length.

At Zip Code Wilmington, for example, a nonprofit coding school launched in Delaware in 2015,

students participate in an intensive “bootcamp” in Java and Javascript, learning the skills to become an “Oracle Certified Professional” or a “Java SE 7 Programmer.” The organization reports that 96 percent of its graduates have found jobs within six months of graduation and that students’ salaries have jumped from an average of \$30,173 before the program to \$63,071 afterwards.²⁵ Yet because Zip Code Wilmington is not a college or university and the coursework is only 12 weeks long, the program is ineligible for Pell funding. This means that, while Zip Code Wilmington’s industry partners subsidize the lion’s share of costs, students must still pay \$3,000 in tuition – a potentially insurmountable barrier for some prospective enrollees.²⁶

In August 2016, the U.S. Department of Education launched an experimental effort – Educational Quality through Innovation Partnerships (EQUIP) – allowing a limited amount of Pell funds to be used for non-college-credit workforce training programs offered in conjunction with community colleges or universities. The Department of Education chose eight programs for this pilot, including Zip Code Wilmington,²⁷ now working in partnership with Wilmington University. The result could be an enormous boon for low-income students interested in the program’s training.

Limited experiments such as EQUIP are positive developments that deserve encouragement. But better yet would be for Congress to consider legislation sponsored by Sens. Rob Portman (R-OH) and Tim Kaine (D-VA) – the Jumpstart Our Businesses By Supporting Students (JOBS) Act (S. 206) – that would expand the use of Pell Grant funds to job training programs that meet the bill’s requirements.²⁸

Under the JOBS bill, which has the support of a bipartisan, cross-ideological coalition, including anti-poverty organizations, business groups and community colleges,²⁹ up to half the maximum Pell amount (currently \$5,815)³⁰ would be available for students enrolling in programs that lead to industry-recognized credentials in fields that meet the needs of local and state employers.

In particular, the bill would expand Pell eligibility to programs that are part of a recognized “career pathway,” as defined by the Workforce Innovation and Opportunity Act; that “align... with the skill needs of industries in the State or regional economy involved”; and that “prepare... an individual to be successful in any of a full range of secondary or postsecondary education options, including apprenticeships”; among other requirements.

And while the proposal does not do away with the 600-clock-hour requirement, it reduces it to 150 hours of instruction over at least 8 weeks, provided that the program also leads to a credential “that is recognized by employers in the relevant industry” and is of sufficient rigor to “meet the hiring requirements of potential employers; and allow[s] the students to apply for any licenses or certifications that may be required to be employed in the field for which the job training is offered.”³¹

The Portman-Kaine legislation doesn’t fully address concerns over the quality of credentialing programs that could be eligible for Pell funding, as well as the availability of Pell funds to support an influx of credential seekers (both of which are discussed below). Nevertheless, this proposal is an excellent starting point for the direction in which federal student aid policy should go.

STATES SHOULD ALSO SUPPORT WORKERS ENROLLING IN QUALITY CREDENTIALING PROGRAMS THAT MEET LOCAL INDUSTRIES’ NEEDS.

States that want to support the pursuit of credentials don't need to wait for the federal government to act. Rather, they can follow the lead of the Commonwealth of Virginia, which recently launched a grant program for credential-seekers – the first of its kind nationwide, according to Sara Dunnigan, Executive Director of Virginia's Board of Workforce Development.

Virginia's New Economy Workforce Development Grant, started in 2016 by Gov. Terry McAuliffe with bipartisan legislative support, pays for two-thirds of the cost of obtaining a credential from a list of state-approved credentials and training providers that is updated each year to reflect changing economic conditions.³² Among the credentials eligible for subsidy in the 2017 high-demand occupations list are commercial drivers' licenses and certifications in IT, construction and building trades (including a series of credentials in “asphalt technology” designed by the Virginia Department of Transportation as well as plumbing, electrical and HVAC). Also on the list are paramedic and nursing certifications as well as credentials for teaching, industrial maintenance and repair and a host of other specialties.

Two unique aspects of the program safeguard it from becoming a free-for-all for low-quality programs and providers. First, the credentials eligible for subsidy are all aligned to a list of occupations deemed to be in “high demand” based on state and local projections and industry feedback. Second, the grant operates on what Dunnigan calls a “pay for performance model” that rewards the completion of a

program, not just enrollment. Training providers – such as SVHEC, community colleges and other organizations – are paid one-third the amount of a student's tuition only after a student completes a program and the other third when the student obtains the credential. Students, meanwhile, are liable for the final one-third of the cost out-of-pocket and must agree to pay the full tuition if they drop out. So far, says Dunnigan, the program has proved immensely popular, with 2,173 Virginians earning workplace credentials in the first year alone. And the program is moreover relatively inexpensive: The Commonwealth appropriated \$20 million over two years to subsidize up to 10,000 new credentials.

The grant has been a particular boon in places such as rural southern Virginia, hard hit by the loss of jobs in tobacco and manufacturing. Of the 20 graduates from SVHEC's IT Academy this summer, for example, 12 were unemployed or underemployed, according to center officials, and would not have been able to enroll in the program absent the state subsidy. “It's been a game-changer,” said SVHEC's Simon-Owens. “I can't overstate how much it means to have accessible hands-on training that provides marketable skills now within reach.”

Of the 20 graduates from SVHEC's IT Academy this summer, for example, 12 were unemployed or underemployed.

While other states are focused on programs to offer “free college” or “free community college,” the Commonwealth of Virginia has found that “free credentials” might prove to be a more effective and cost-effective strategy of meeting the educational needs of its residents and the talent needs of its businesses.

AVOIDING THE FOR-PROFIT FIASCO

Despite its obvious benefits, the champions of expanding student financial aid to credential-seekers must confront two potential objections. The first is the very legitimate concern over maintaining quality control and ensuring that only quality credential programs that produce skills of true marketable value are eligible for subsidy. What credentialing advocates must avoid is a repeat of what’s happened in the for-profit college industry, where all too many low-quality providers milked the federal government of billions of dollars in federal financial aid while students failed to graduate or earned diplomas of questionable worth.

Already, there is an overwhelming array of credential providers and programs, with multiple accrediting organizations in a variety of fields. According to the nonprofit Workcred, more than 4,000 institutions – including colleges and universities as well as workforce development agencies, nonprofits and for-profit training providers – are issuing credentials.³³ But, as the organization points out, there is “no common definition of quality or value” and “no consistency across industry sectors.”

While the safeguards provided by the Portman-Kaine legislation and the review processes undertaken by the Commonwealth of Virginia for its credentialing grant program provide some reassurance of quality control, what’s needed is a broader level of national standardization that brings order to the credentialing marketplace, ensures consistent quality and builds employer and consumer confidence. Students investing in credentialing programs should know, for example, if the credentials they’re earning are portable throughout an industry and from state to state.

Students investing in credentialing programs should know, for example, if the credentials they’re earning are portable throughout an industry and from state to state.

Industry is handling this problem to some extent; in manufacturing, for example, the National Association of Manufacturers’ think tank, the Manufacturing Institute, has created a list of “NAM-Endorsed Certifications” to set the industry standard in fields such as machining, metalworking, diecasting and welding.³⁴ The problem with a market-only approach, however, is that too many students may end up acquiring the “wrong” credentials while the market decides what’s of value and what is not. And, in the meantime, credentialing risks losing its credibility if low-quality providers are allowed to flourish.

One promising way to standardize and elevate the credentialing marketplace is through efforts such as Credential Engine, a nonprofit supported by the Lumina Foundation that is working to develop a “credential registry” for students, workers and employers to find and compare credentials for their relative worth. The goal of the registry, when it becomes operational, is for users to be able to make “apples to apples” comparisons of who is offering a particular credential, how much it costs, what it’s worth in the job market, what a student can expect to learn and what kinds of jobs a student can expect to get.³⁵ In addition, the registry hopes to encourage third-party developers to use the registry data for consumer-facing applications such as rankings or search engines.

This effort is currently funded through philanthropic and private dollars, and participation by credentialing providers is purely voluntary. Government should, however, invest resources into efforts like these to accelerate the development of a standardized credentialing marketplace that students and employers can trust – and U.S. taxpayers can feel comfortable about supporting.

EXPANDING THE PELL GRANT PIE

A second concern that advocates of expanded student aid for credentialing must address is funding. As a discretionary program, Pell grants are already subject to the whimsy of Congress and threatened cuts to funding. In September 2017, a broad coalition of groups sent a letter to the Senate’s top appropriators, Sens. Roy Blunt (R-MO) and Patty Murray (D-WA), protesting the rescission of \$1.3 billion from the Pell Grant program in fiscal 2017 and urging against further cuts.³⁶ If Pell grants are extended to cover credentialing programs, whether a potentially shrinking pool of resources is spread even thinner is a valid worry.

It’s difficult to gauge how much additional funding would be necessary to provide a credible level of support to the nation’s burgeoning credentialing system. For one thing, credentialing programs vary widely in content, length and price, which makes it tough to define the “average” cost of obtaining a credential. Second, while expanding Pell grants to credentialing could attract an influx of new grantees, it’s also the case that many existing beneficiaries might switch the use of their grants from degree-granting programs to credentialing opportunities. It’s impossible to measure the impact of this “substitution effect” on funding.

While expanding Pell grants to credentialing could attract an influx of new grantees, it’s also the case that many existing beneficiaries might switch the use of their grants from degree-granting programs to credentialing opportunities.

Nevertheless, without a viable solution, the prospect of divvying up the precious Pell Grant pie into ever-smaller pieces could spell the doom of a “workforce Pell” expansion. One way to handle this concern is to propose a pilot program with a set pot of funding for a defined number of grantees or programs, as Virginia did with its New Economy Workforce Credential Grant program. A set-aside of, say, \$100 million could be enough to have real impacts while allowing room for experimentation and refinement.

Another avenue is to find a source of funding – such as a small surtax on the supersized endowments of elite universities. In 2016, according to a survey by the National Association of College and University Business Officers, the nation’s 50 wealthiest universities owned \$331 billion in endowment wealth,³⁷ a figure equal to three times California’s annual state budget.³⁸ Among the “best endowed” are Yale (with \$25.4 billion), Harvard (\$34.5 billion), Stanford (\$22.4 billion), Princeton (\$22.2 billion) and MIT (\$13.2 billion).

While these elite schools have argued that their outsized endowments allow them to open their doors to students of lesser resources, the truth is that these schools have done little to expand their class sizes to admit more lower-income students or to increase the share of lower-income students in their classes. Stanford

University’s Raj Chetty³⁹ finds that students from the top 1% of families by income are 77 times more likely to attend an Ivy League school than someone from the bottom fifth, and that access to elite schools by poorer students has remained “largely unchanged,” despite vast growth in endowment wealth.⁴⁰

Growing evidence that America’s elite schools might be doing more to calcify inequality than mitigate it has already led to bipartisan interest in forcing these schools to share their wealth, particularly given the level of federal support these institutions receive in tax breaks for donors as well as money for publicly-supported research.⁴¹ Calculations by the Haas Institute⁴² at the University of California, Berkeley, estimate that the tax subsidies alone supporting college endowments totaled \$19.6 billion in 2012.⁴³

Calculations by the Haas Institute at the University of California, Berkeley, estimate that the tax subsidies alone supporting college endowments totaled \$19.6 billion in 2012.

The vast amounts of wealth locked up in university endowments means that even a very modest surtax could provide a significant amount of funding for low-income students. Mark Schneider of the American Institutes of Research and Jorge Klor de Alva of Nexus Research, for example, have proposed a sliding

scale excise tax of between 0.5% and 2.0% for endowments above \$500 million, which they estimate could raise as much as \$5 billion a year.⁴⁴ While Schneider and Klor de Alva would like to see the funds go toward the nation’s community colleges, some portion could just as easily go toward expanding Pell funds for credentialing.

SUCCESS BY DEGREE OR CREDENTIAL

Higher education policy should be more flexible and inclusive and less heavily tilted toward four-year college as the “best” path for all students.

By supporting the aspirations of students seeking credentials, as well as those seeking traditional degrees, progressives can offer an inclusive vision of mobility and shared prosperity that does not exclude the two-thirds of Americans who do not have – and may not want – a four-year college degree. At the same time, they can help build a stronger system of postsecondary education in America that grows the economy and helps more Americans get ahead.

Ultimately, the right way to create more opportunity is to build a robust system of occupational credentialing that parallels the nation’s traditional higher education structure in stature, credibility and support and that offers every student an affordable path to a good job with good wages – either with a diploma or through a credential.

ABOUT THE AUTHOR

Anne Kim is a PPI senior fellow, senior writer at the Washington Monthly, and a fellow at the Aspen Institute Initiative on Financial Security.

References

- 1 "Employment Projections," U.S. Bureau of Labor Statistics, last modified April 20, 2017, https://www.bls.gov/emp/ep_chart_001.htm
- 2 Anthony Carnevale, Nicole Smith and Jeff Strohl, "Recovery: Job Growth and Education Requirements Through 2020," Georgetown University Center on Education and the Workforce, 2013. https://cew.georgetown.edu/wp-content/uploads/2014/11/Recovery2020.ES_Web_.pdf
- 3 Anne Kim, "Why Democrats Should Dump 'Free College,'" Washington Monthly, Sept. 12, 2017. <http://washingtonmonthly.com/2017/09/12/why-democrats-should-dump-free-college/#.WbhVTUPbU89.twitter>
- 4 "SVHEC Celebrates Workforce Training Completers," Southern Virginia Higher Education Center, <https://www.svhec.org/workforce/workforce-news/730-svhec-celebrates-workforce-training-completers>
- 5 "Microsoft announces fifth expansion to data center in Mecklenburg County, creating 44 jobs," Richmond Times-Dispatch, Nov. 9, 2016. http://www.richmond.com/business/local/microsoft-announces-fifth-expansion-to-data-center-in-mecklenburg-county/article_f95e50dd-444a-5dc4-81e0-827030fc8385.html
- 6 "Federal Support for Higher Education Comes From Spending Programs and the Tax Code," The Pew Charitable Trusts, March 7, 2017. <http://www.pewtrusts.org/en/research-and-analysis/analysis/2017/03/07/federal-support-for-higher-education-comes-from-spending-programs-and-the-tax-code>
- 7 20 U.S. Code § 1088, accessed at <https://www.law.cornell.edu/uscode/text/20/1088>
- 8 "Total Pell Grant Expenditures and Number of Recipients over Time," College Board. <https://trends.collegeboard.org/student-aid/figures-tables/pell-grants-total-expenditures-maximum-and-average-grant-and-number-recipients-over-time>
- 9 "Credentialing," National Institute of Metalworking Skills, Inc. <https://www.nims-skills.org/web/nims/6>
- 10 "IT Careers for Professionals," CompTIA. <https://certification.comptia.org/why-certify/professionals>
- 11 Anne Kim, "A Matter of Degrees," Washington Monthly, Sept.-Oct. 2013. <http://washingtonmonthly.com/magazine/septoct-2013/a-matter-of-degrees/>
- 12 Angela Hanks, "Making Pell Work: How America's \$30 billion investment in need-based college aid can be more job-driven," National Skills Coalition, July 2015. <https://www.nationalskillscoalition.org/resources/publications/file/2015-07-Making-Pell-Work-How-Americas-30-Billion-Investment-in-Need-Based-College-Aid-Can-Be-More-Job-Driven.pdf>
- 13 Hanks, "Making Pell Work."
- 14 Janet Pinkerston, "What to Expect From Your First Tech Job," CompTIA, Aug. 6, 2012. <https://certification.comptia.org/it-career-news/post/view/2012/08/06/what-to-expect-from-your-first-tech-job>
- 15 "Occupational Outlook Handbook: Welders, Cutters, Solderers and Brazers," U.S. Bureau of Labor Statistics, last modified Dec. 17, 2015. <https://www.bls.gov/ooh/production/welders-cutters-solderers-and-brazers.htm#tab-5>
- 16 "Occupational Outlook Handbook: Electricians," U.S. Bureau of Labor Statistics, last modified Dec. 17, 2015. <https://www.bls.gov/ooh/construction-and-extraction/electricians.htm>

- 17 Anthony P. Carnevale, Ban Cheah, Andrew R. Hanson, "The Economic Value of College Majors," Georgetown University Center on Education and the Workforce, 2015. <https://cew-7632.kxcdn.com/wp-content/uploads/The-Economic-Value-of-College-Majors-Full-Report-web-FINAL.pdf>
- 18 "United States' Forgotten Middle," National Skills Coalition, <https://www.nationalskillscoalition.org/resources/publications/2017-middle-skills-fact-sheets/file/United-States-MiddleSkills.pdf>
- 19 Harry Holzer, "Building a New Middle Class in the Knowledge Economy," Progressive Policy Institute, April 2, 2017. <http://www.progressivepolicy.org/publications/policy-memo/building-new-middle-class-knowledge-economy/>
- 20 Danielle Douglas-Gabriel, "Minorities and poor college students are shouldering the most student debt," Washington Post, May 19, 2015. https://www.washingtonpost.com/news/work/wp/2015/05/19/minorities-and-poor-college-students-are-shouldering-the-most-student-debt/?utm_term=.28fb13b76676
- 21 Janie Boschma and Ronald Brownstein, "The Concentration of Poverty in American Schools," The Atlantic, Feb. 29, 2016. <https://www.theatlantic.com/education/archive/2016/02/concentration-poverty-american-schools/471414/>
- 22 Emily Tate, "Graduation Rates and Race," Insider Higher Ed, April 26, 2017. <https://www.insidehighered.com/news/2017/04/26/college-completion-rates-vary-race-and-ethnicity-report-finds>
- 23 "Average Published Undergraduate Charges by Sector, 2016-17," College Board. <https://trends.collegeboard.org/college-pricing/figures-tables/average-published-undergraduate-charges-sector-2016-17>
- 24 34 CFR 668.8, accessed at <https://www.law.cornell.edu/cfr/text/34/668.8>
- 25 "Outcomes," Zip Code Wilmington. <http://www.zipcodewilmington.com/outcomes>
- 26 "Pricing," Zip Code Wilmington. <http://www.zipcodewilmington.com/pricing>
- 27 "Fact Sheet: ED Launches Initiative for Low-Income Students to Access New Generation Of Higher Education Providers," U.S. Department of Education, Aug. 16, 2016. <https://www.ed.gov/news/press-releases/fact-sheet-ed-launches-initiative-low-income-students-access-new-generation-higher-education-providers>
- 28 S. 206 – JOBS Act of 2017. Available at <https://www.congress.gov/bill/115th-congress/senate-bill/206/text>
- 29 "Portman, Kaine Introduce Bipartisan JOBS Act to Help Workers Access Training for In-Demand Career Fields," Office of Sen. Rob Portman, Jan. 25, 2017. <https://www.portman.senate.gov/public/index.cfm/2017/1/portman-kaine-introduce-bipartisan-jobs-act-to-help-workers-access-training-for-in-demand-career-fields>
- 30 "Pell Grant Maximum for 2016-17 Announced," Federal Student Aid, U.S. Department of Education. <https://teststudentaid.ed.gov/testise/about/announcements/pell-2016-17>
- 31 S. 206.
- 32 "New Economy Workforce Credential Grant Program," ElevateVirginia.org, <http://www.elevatevirginia.org/wp-content/uploads/2014/04/High-Demand-Fields.Programs.pdf>
- 33 "Certificates, certifications, badges, licenses... what are they worth to the workforce?" WorkCred, <https://www.workcred.org/Default.aspx>
- 34 "NAM-Endorsed Certifications," Manufacturing Institute, <http://www.themanufacturinginstitute.org/Skills-Certification/Certifications/NAM-Endorsed-Certifications.aspx>
- 35 "Credential Registry Overview," Credential Engine, <http://credreg.net>

- 36 Higher Education Advocates Call on Congress to Protect Pell Grant Funding, The Education Trust, Sept. 5, 2017. https://edtrust.org/press_release/higher-education-advocates-call-congress-protect-pell-grant-funding/
- 37 "U.S. and Canadian Institutions Listed by Fiscal Year (FY) 2016 Endowment Market Value and Change in Endowment Market Value from FY2015 to FY2016," National Association of College and University Business Officers, <http://www.nacubo.org/Documents/EndowmentFiles/2016-Endowment-Market-Values.pdf>
- 38 "Governor's Budget Summary 2016-17," available at <http://www.ebudget.ca.gov/2016-17/pdf/BudgetSummary/SummaryCharts.pdf>
- 39 Raj Chetty, John Friedman, Emmanuel Saez, Nicholas Turner and Danny Yagan, "Mobility Report Cards: The Role of Colleges in Intergenerational Mobility," The Equality of Opportunity Project, July 2017. http://www.equality-of-opportunity.org/papers/coll_mrc_paper.pdf
- 40 Chetty et al., "Mobility Report Cards."
- 41 Anne Kim, "Ivy League Endowments Under Fire," Washington Monthly, Sept.-Oct. 2017, <http://washingtonmonthly.com/magazine/septemberoctober-2017/ivy-league-endowments-under-fire/>
- 42 Charlie Eaton, "The Ivory Tower Tax Haven," Haas Institute, March 2017. http://haasinstitute.berkeley.edu/sites/default/files/hier_ed_tax_haven_april_18.pdf
- 43 Eaton, "Ivory Tower Tax Haven."
- 44 Jorge Klor de Alva and Mark Schneider, "Rich Schools, Poor Students: Tapping Large University Endowments to Improve Student Outcomes," Nexus Research, April 2015, http://nexusresearch.org/wp-content/uploads/2015/06/Rich_Schools_Poor_Students.pdf



The Progressive Policy Institute is a catalyst for policy innovation and political reform based in Washington, D.C. Its mission is to create radically pragmatic ideas for moving America beyond ideological and partisan deadlock.

Founded in 1989, PPI started as the intellectual home of the New Democrats and earned a reputation as President Bill Clinton’s “idea mill.” Many of its mold-breaking ideas have been translated into public policy and law and have influenced international efforts to modernize progressive politics.

Today, PPI is developing fresh proposals for stimulating U.S. economic innovation and growth; equipping all Americans with the skills and assets that social mobility in the knowledge economy requires; modernizing an overly bureaucratic and centralized public sector; and defending liberal democracy in a dangerous world.

© 2017
Progressive Policy Institute
All rights reserved.

Progressive Policy Institute
1200 New Hampshire Ave NW,
Suite 575
Washington, DC 20036

Tel 202.525.3926
Fax 202.525.3941

info@ppionline.org
progressivepolicy.org