



The Administration and Congress Should Not Undermine Registered Apprenticeships

By Angela Hanks

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During a March 2017 meeting with CEOs representing American and German firms,¹ President Donald Trump went big on apprenticeships: He committed—seemingly offhandedly—to creating 5 million new apprenticeships in five years.² In June, the president signed an executive order to expand apprenticeship programs. Since then, the U.S. Department of Labor (DOL), under the leadership of Secretary Alexander Acosta, has been working to carry out the provisions of the order, including by establishing the Task Force on Apprenticeship Expansion and developing a new category of industry-recognized apprenticeship programs.³

Congress has also taken steps to expand access to apprenticeship programs. Over the past few years, members of Congress have introduced a flurry of apprenticeship bills and have twice appropriated new funding to support apprenticeships.⁴ More recently, in December 2017, House Republicans on the Education and the Workforce Committee unveiled their vision for reauthorizing the Higher Education Act of 1965. For the first time, the legislation included a new title on expanding access to apprenticeship programs.⁵

The energy around apprenticeship programs—which combine paid on-the-job training and classroom instruction—is encouraging. But the devil is in the details. Creating 5 million apprenticeships is a tall order in a nation that currently has only roughly 500,000 apprentices.⁶ Therefore, it is critical that the administration take care to grow these programs thoughtfully and include safeguards to ensure the programs created are high-quality and meet the needs of workers and employers alike.

This issue brief describes why the current apprenticeship system is successful. It also reviews the actions taken so far by the Trump administration, Obama administration, and Congress to expand apprenticeship, making the case for maintaining—and even strengthening—the quality of apprenticeship programs as policymakers seek to expand their use in the United States.

The Registered Apprenticeship system protects workers and helps ensure program quality

The Registered Apprenticeship system was first established 80 years ago under the National Apprenticeship Act, also known as the Fitzgerald Act.⁷ While apprenticeships had existed for centuries before the law was enacted, the Fitzgerald Act ushered in the era of the modern apprenticeship by enacting labor standards to “safeguard the welfare of apprentices.” The regulations established under the act require apprenticeship program sponsors—typically employers or unions—to meet certain requirements in order for the DOL to recognize their programs.⁸ For example, these programs must involve employers; offer structured on-the-job training and related technical or academic classroom instruction; and have a progressively increasing schedule of wages.⁹ Registered programs culminate in a nationally portable and recognized credential issued by the DOL.

Today, Registered Apprenticeship is widely considered an effective training strategy that leads to quality employment, equips workers with job-relevant skills, and helps employers meet their current and future workforce needs. The underpinning of all Registered Apprenticeship programs in the United States continues to be the labor standards that exist to safeguard workers’ welfare. Because of these standards, apprenticeships are lauded by policymakers, employers, workers, and other stakeholders as the gold standard of worker training.

Although the Registered Apprenticeship system has been around for decades, policymakers have only recently begun to make investments to expand the model. Since 2015, the Obama administration, Congress, state and local governments, and private foundations have made unprecedented investments to grow apprenticeship programs.¹⁰ At the federal level, since 2015, the Obama administration and Congress made \$265 million available in the form of grants and contracts to expand apprenticeship programs.¹¹ Federal dollars have also gone to states to catalyze new efforts to expand apprenticeship; to contracts to expand apprenticeships to new industries and expand access for groups that have historically been left behind, such as women and people of color; and to efforts to make related instruction more affordable, among other priorities.¹² These investments have spurred or been made in addition to investments at the state and local levels to establish new apprenticeship pathways.¹³ Recent data show that these efforts have begun to pay off. The number of apprentices in the United States grew from roughly 375,000 in 2013 to more than half a million in 2016.¹⁴

Administrative action on apprenticeship

President Trump’s June 2017 executive order called on the administration to take several steps to further expand apprenticeships. The order directed members of President Trump’s Cabinet to use existing funding sources to promote apprenticeships; expand access to underrepresented groups, including high school students,

the formerly incarcerated, disconnected youth, and veterans; and support incorporating apprenticeships at postsecondary educational institutions. The order also established a new Task Force charged with identifying “strategies and proposals to promote apprenticeships.”¹⁵ The Task Force’s duties include reporting on strategies to establish new industry-recognized apprenticeships.

When the task force met for the first time in November, Secretary Acosta kicked off the convening by asserting that the Registered Apprenticeship system “does not work” and that a parallel “industry-recognized” apprenticeship system is needed to scale apprenticeship programs nationwide.¹⁶ This move to establish industry-recognized apprenticeship programs is perhaps the most significant shift from Obama administration policy. These programs would be certified by third parties—including trade or industry groups, companies, nonprofits, unions, and joint labor-management organizations—instead of the DOL.

President Trump’s executive order allows the secretary of labor to promulgate regulations to determine how third parties can recognize these programs; to establish guidelines or requirements for third parties to follow in recognizing these new programs; to explore how these programs might be considered for expedited registration; and to establish a program review process. The order also permits the secretary to maintain the existing system for employers who wish to continue using it. This suggests that the industry-recognized apprenticeship system would run parallel to the Registered Apprenticeship system.¹⁷

While the administration appears to be moving forward with plans to overhaul what it has deemed an ineffective Registered Apprenticeship system, it has neglected to articulate clearly the barriers that it perceives are holding back apprenticeship growth, or a vision for expansion that would not undermine existing programmatic standards. Moreover, it is possible that the administration, in its effort to reform the existing system, could ultimately weaken labor standards and the protections that ensure apprenticeship programs lead to good outcomes for workers.

Industry-recognized apprenticeship would undermine the Registered Apprenticeship system

If the Registered Apprenticeship system is, as Secretary Acosta says, broken, it remains unclear why the administration is not focusing its efforts on reforming the current system but instead on creating a new system that is duplicative of the existing one. By establishing a parallel system, the administration risks compromising program quality among new programs and Registered Apprenticeships alike.

Creating confusion among employers and workers and undermining credential portability

The Registered Apprenticeship credential sends an important labor market signal for both workers and employers. For workers, the credential aids in labor market mobility, demonstrating to potential employers that workers have the skills and experience necessary to do the job. Similarly, employers rely on the credential to indicate what skills, knowledge, and abilities a worker possesses.

Creating a parallel system using the same term—apprenticeship—will likely breed confusion among employers and workers. It will make it more difficult for employers to discern whether a worker who has completed an apprenticeship program received training that meets rigorous standards or whether they participated in a lower-quality program that goes by the same name. Such confusion will almost certainly make the credential less portable across employers and geographic regions.

Undermining program quality

Currently, the DOL, or a state agency acting on the department's behalf, has the power to recognize apprenticeship programs and to hold them accountable for meeting and maintaining certain quality standards. By comparison, the order directs the secretary of labor to establish guidelines or requirements third parties can or must follow to ensure that industry-recognized programs meet quality standards.¹⁸ This language suggests that third parties could have substantial discretion in determining the standards underpinning industry-recognized apprenticeships, potentially with little federal oversight and fewer opportunities for enforcement.

Registered Apprenticeship standards

A Registered Apprenticeship program, defined by the DOL, is a program that meets the terms and conditions for qualification, recruitment, selection, employment, and training as required under federal regulations. Those regulations state that an apprenticeship program must have standards that address a range of issues, including:

- The apprentice's employment and training in a specific skilled occupation
- The duration of an apprenticeship, including whether the program is time- or competency-based
- The work processes for which an apprentice will be given supervised training
- The structured, related instruction that will be provided by a qualified instructor
- Wage progression tied to skills mastery, beginning at least at the federal minimum wage
- The ratio of apprentices to journey workers
- Federal recognition of program completion, as embodied by a certificate of completion issued by the DOL
- Compliance with Equal Employment Opportunity regulations governing Registered Apprenticeship programs
- The existence of an apprenticeship agreement between an apprentice and sponsor¹⁹

This development is concerning given that President Trump’s June executive order also put forth a new definition of apprenticeship that is ambiguous on several key elements of apprenticeship programs. The executive order describes apprenticeship as an “arrangement that includes a paid-work component and an educational and instructional component, wherein an individual obtains workplace-relevant knowledge and skills.”²⁰ The order is silent on key elements of Registered Apprenticeship, including wage progression; whether these programs pay at least the minimum wage; the skills an apprentice will learn on the job; the manner in which these skills are obtained; and what credential apprentices will earn at the end of the program.²¹

Opening the door to federal dollars while relaxing quality assurance

At the same time the DOL is potentially seeking to relax the standards governing apprenticeship programs, the executive order indicates that these programs should have greater access to federal funding sources. Additionally, during the Task Force meeting, Education Secretary Betsy DeVos suggested that greater flexibility in higher education was needed to help promote apprenticeship expansion.²²

Increasing federal resources to support apprenticeship programs is a worthwhile goal, one that the Center for American Progress has strongly supported.²³ While there are already several federal funding sources that could be used to support apprenticeship programs—such as the Workforce Innovation and Opportunity Act and, in some instances, federal student aid programs²⁴—there is currently no ongoing funding source dedicated solely to apprenticeship programs. Congress has done its part by appropriating funding for apprenticeships in the past two spending bills, but dedicated, reliable funding is necessary to make program growth sustainable. When those investments are coupled with efforts to weaken federal oversight, however, there is heightened potential for waste or abuse, which in this case will surely come at the expense of workers.

Compromising goals to expand apprenticeships to new industries and new populations

In addition to the administration’s efforts to create a parallel apprenticeship track, in September, the DOL canceled several contracts intended to help improve diversity in apprenticeship programs and expand apprenticeship programs into new industries. In an October letter to Secretary Acosta, Sen. Patty Murray (D-WA), and Rep. Rosa DeLauro (D-CT) expressed concern about the cancellations and urged the secretary to “continue funding what we know works.”²⁵ While the DOL has reinstated several intermediary contracts, it has not yet committed to continuing to fund state grants authorized by Congress. It remains unclear whether the administration will continue to actively pursue the Obama administration’s goal to both “double and diversify” apprenticeship programs.²⁶

Congressional action on apprenticeship

In addition to a flurry of bills that members of the House and Senate have introduced in recent years, Congress has provided direct support to expand apprenticeship in its two most recent full-year spending bills.²⁷ Congress' action thus far has been crucial to helping increase the number of apprenticeships nationwide. Funding has helped states kick-start new apprenticeship initiatives and has helped the DOL pursue important goals around expanding apprenticeship into new industries and increasing access for underrepresented groups.²⁸

More recently, the House Committee on Education and the Workforce has sought to embed apprenticeship programs into the Higher Education Act, proposing a new title in the act's reauthorization legislation: "Expanding Access to In-Demand Apprenticeships."²⁹ This title would establish a competitive grant program that supports higher education and employer partnerships dedicated to creating new industry-led earn-and-learn programs. Funding awarded to these partnerships would be used to purchase equipment and student supplies; reimburse up to 50 percent of student wages; develop industry-specific programs; help industry experts transition to an academic setting; and pay for costs related to industry-recognized certifications. Additionally, the title would create a new business-led review panel responsible for reviewing grant applications and making recommendations to the secretary of education.³⁰

While Congress' acknowledgement of work-based learning is encouraging, the legislation as currently drafted falls short. At the most basic level, the bill appears to conflate earn-and-learn strategies with apprenticeship programs. Apprenticeship is an earn-and-learn model; thus, these terms are not interchangeable. The bill does not include any references to Registered Apprenticeship, instead opting to refer to apprenticeships more generally without offering a definition. And while the bill does outline what it considers to be an earn-and-learn strategy,³¹ similar to Trump's executive order, the definition is ambiguous when it comes to the wages an apprentice can earn and how the training will be structured and delivered. Unlike the executive order, however, the House bill requires these programs to culminate in a recognized postsecondary credential.³²

It is unclear what purpose the business-led review panel would serve beyond adding another layer of bureaucracy to the grant-making process. Federal agencies are frequently tasked with designing, reviewing, awarding, and overseeing grant programs and are certainly equipped to fill this role themselves. Moreover, a business-led panel reviewing grants to business and higher education partnerships could create conflicts of interest. For example, a conflict could arise if a trade association is charged with reviewing an application that involves one of its members.

Finally, the grant program fails to include two essential partners for apprenticeship programs: the DOL and labor unions. The bill suggests that the program would be entirely administered by the Department of Education, despite the DOL's experience administering apprenticeship programs. The bill also fails to spell out a role for organized labor, which has been responsible not only for sponsoring many of the apprenticeship programs that exist today but also for sustaining and advancing the model over the past several decades.

In its current form, the bill would potentially create additional confusion for employers and workers, as well as result in lower-quality apprenticeship programs.

The Trump administration and Congress should expand apprenticeship responsibly

To be sure, the Registered Apprenticeship system is not without flaws. Too few employers participate; programs are still largely confined to a handful of industries; and far too often, women and people of color are unable to gain equitable access to these programs. Unfortunately, the Task Force, June executive order, and recent congressional proposals are unlikely to meaningfully address any of these problems. In fact, a parallel track that lacks adequate worker protections could ultimately lead to a new problem: the proliferation of low-quality programs that do not offer the skills or wages for which apprenticeships are known.

Learning from apprenticeship expansion in the United Kingdom

The United Kingdom's example shows that well-intentioned efforts to expand apprenticeship programs can lead to unintended consequences if not pursued carefully. Since 2005, the British government has worked to expand apprenticeships, committing £1 billion in funding in 2009. Over time, its annual investment in apprenticeships has grown to nearly £1.5 billion.³³ In 2015, the government set a goal of creating 3 million apprenticeships by 2020.³⁴ Studies conducted by independent researchers³⁵ and by the Committee of Public Accounts³⁶ in 2015 and 2016, respectively, revealed that the government's focus on apprenticeship had largely revolved around increasing program quantity, not improving program quality. As a result, the United Kingdom experienced a proliferation of lower-quality apprenticeship programs. A Sutton Trust report found that 60 percent of apprenticeship programs in the United Kingdom were at the intermediate level, providing little in terms of increasing lifetime earnings beyond high school.³⁷ Additionally, British news outlets reported incidences of employers gaming the apprenticeship system to access federal funds. For instance, a government website hosted an advertisement for apprentice sandwich artists at a popular fast food chain who would be paid just £3.50 an hour.³⁸

Over the past several years, the United Kingdom has taken steps to improve program quality. In 2013, then-Prime Minister David Cameron announced a set of reforms to the apprenticeship system. Those reforms included establishing the Trailblazers program, which brings together groups of employers to develop apprenticeship standards for occupations within their industries; establishing new math and English language arts requirements; setting minimum program length at one year; and establishing minimum program standards.³⁹ The government also established a new Institute for Apprenticeship⁴⁰ that helps ensure quality program standards.⁴¹

More recently, in an effort to help expand apprenticeship programs, the federal government implemented a new apprenticeship levy whereby companies that pay more than £3 million annually in wages must pay 0.5 percent of that amount into a training fund. The British government pays an additional 10 percent on top of what employers contribute.⁴²

The 2015 and 2016 studies suggest that the process of boosting program quality is ongoing, but these actions to reform the system by introducing safeguards are a step in the right direction.

Rather than focusing on expanding programs of questionable quality, the administration and Congress should seek to address some of the real challenges holding apprenticeship programs back in the United States. To that end, policymakers should seek to strengthen program quality and make it easier for employers and workers to engage in high-quality apprenticeship programs.

Policymakers should seek to facilitate the expansion of apprenticeships into new industries—such as health care, information technology, financial services, and child care—through targeted grant-making and the provision of technical guidance and assistance. Policymakers should also work to ensure equitable access to apprenticeship programs and to improve completion rates among women and people of color, who far too often are found either in the lowest paying occupations or left out of apprenticeship programs altogether.⁴³ The administration can help ensure more equal access by continuing to support equity intermediary contracts that are intended to make apprenticeships more diverse. The administration can, for example, require apprenticeship grantees to prioritize outreach and supports to help underrepresented groups enroll and complete programs and enforce equal opportunity employment rules governing apprenticeship programs.

The administration and Congress can also encourage employers to increase investments in their workforce by providing incentives such as seed funding for new programs, targeted tax credits, and investments in labor-management-led workforce intermediaries. These investments can help minimize the costs and risks to employers interested in starting apprenticeship programs. Intermediaries in particular can help employers navigate the registration and curriculum development processes.⁴⁴

Policymakers should also be clear in defining what programs federal legislation or administrative action will support. For example, if Congress seeks to fund earn-and-learn programs instead of apprenticeship programs, the law should be clear on the distinctions.

To the extent that the process of registering apprenticeship programs is too complicated for employers, the administration and Congress should seek to reform registration in a manner that does not compromise program quality or quality assurance or otherwise harm workers.

Conclusion

Registered Apprenticeship programs are an important tool to help raise workers' wages, equip them with in-demand skills, and meet employer needs. These programs are effective because of the rules of the road that guide their development and execution. Workers need these safeguards to ensure that they are being paid for their work, receiving job-relevant training, and earning a credential that has labor market value.

The administration and Congress have rightly recognized that apprenticeship strategies are effective for workers and employers alike. However, recent efforts to grow these programs appear to be coming at the expense of the quality standards essential to their success. Policymakers owe it to workers and employers to get the details right.

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Endnotes

- 1 Catherine Lucey, "Job Training Session With Merkel Shows Ivanka's Influence," *U.S. News & World Report*, March 17, 2017, available at <https://www.usnews.com/news/politics/articles/2017-03-17/trump-merkel-talk-job-training>.
- 2 Suzanne Lucas, "Trump Wants to Create 5 Million Apprenticeships in 5 Years (Because Marc Benioff Told Him to Do It)," *Inc.*, March 18, 2017, available at <https://www.inc.com/suzanne-lucas/trump-wants-to-create-5-million-apprenticeships-in-5-years-because-marc-benioff-.html>.
- 3 Executive Order no. 13801, *Code of Federal Regulations*, "Expanding Apprenticeships in America" title 3 (2017), available at <https://www.gpo.gov/fdsys/pkg/FR-2017-06-20/pdf/2017-13012.pdf>.
- 4 *Consolidated Appropriations Act, 2016*, Public Law 113, 114th Cong., 1 sess. (December 18, 2015); *Consolidated Appropriations Act, 2017*, Public Law 31, 115th Cong., 1 sess. (May 5, 2017).
- 5 *PROSPER Reform Act*, H. Rept. 4508, 115th Cong. 1 sess. (Government Printing Office, 2017).
- 6 U.S. Department of Labor, "Registered Apprenticeship National Results Fiscal Year (FY) 2016 (10/01/2015 to 9/30/2016)," available at https://doleta.gov/oa/data_statistics.cfm (last accessed November 2017).
- 7 U.S. Department of Labor Employment and Training Administration, "History and Fitzgerald Act," available at <https://doleta.gov/OA/history.cfm> (last accessed November 2017).
- 8 *Ibid.*
- 9 29 C.F.R. §29.
- 10 U.S. Department of Labor, "ApprenticeshipUSA Investments," available at <https://www.dol.gov/featured/apprenticeship/grants> (last accessed November 2017).
- 11 Angela Hanks, "Now Is the Time to Invest in Apprenticeships" (Washington: Center for American Progress, 2016), available at <https://www.americanprogress.org/issues/economy/reports/2016/11/18/292558/now-is-the-time-to-invest-in-apprenticeships/>.
- 12 U.S. Department of Labor, "ApprenticeshipUSA Investments."
- 13 Angela Hanks and Ethan Gurwitz, "How States Are Expanding Apprenticeship" (Washington: Center for American Progress, 2016), available at <https://www.americanprogress.org/issues/labor/report/2016/02/09/130750/how-states-are-expanding-apprenticeship/>.
- 14 U.S. Department of Labor Office of Apprenticeship, "Registered Apprenticeship National Results Fiscal Year (FY) 2016 (10/01/2015 to 9/30/2016)."
- 15 Executive Order no. 13801, 82 Fed. Reg. 28229 (June 20, 2017).
- 16 *Politico*, "Acosta: Apprenticeship program 'does not work,'" November 14, 2017, available at <https://www.politico.com/newsletters/morning-shift/2017/11/14/acosta-apprenticeship-program-does-not-work-223345>.
- 17 *Ibid.*
- 18 Executive Order no. 13801, *Code of Federal Regulations*, "Expanding Apprenticeships in America."
- 19 29 C.F.R. §29.
- 20 Executive Order no. 13801, *Code of Federal Regulations*, "Expanding Apprenticeships in America."
- 21 Angela Hanks, "How Trump's Executive Order Would Undermine Quality Apprenticeship," Center for American Progress, June 15, 2017, available at <https://www.americanprogress.org/issues/economy/news/2017/06/15/434541/trumps-executive-order-undermine-quality-apprenticeship/>.
- 22 Inaugural Meeting of the Task Force on Apprenticeship Expansion at the U.S. Department of Labor attended by the author, November 13, 2017.
- 23 Angela Hanks, "Now Is the Time to Invest in Apprenticeships."
- 24 Employment and Training Administration, "The Federal Resources Playbook for Registered Apprenticeship," available at <https://www.doleta.gov/oa/federalresources/playbook.pdf> (last accessed November 2017).
- 25 Letter from Senator Patty Murray and Representative Rosa DeLauro, October 13, 2017, available at <https://delaura.house.gov/sites/delauro.house.gov/files/Joint-Congress-Letter-to-Labor-Apprenticeship-Funding.pdf>.
- 26 Portia Wu, "National Apprenticeship Week: Join the Movement, Now Half a Million Strong," Commerce.gov Blog, November 14, 2016, available at <https://www.commerce.gov/news/blog/2016/11/national-apprenticeship-week-join-movement-now-half-million-strong>.
- 27 *Consolidated Appropriations Act, 2016*, Public Law 113, 114th Cong., 1 sess. (December 18, 2015); *Consolidated Appropriations Act, 2017*, Public Law 31, 115th Cong., 1 sess. (May 5, 2017).
- 28 U.S. Department of Labor, "ApprenticeshipUSA Investments."
- 29 *PROSPER Reform Act*, H. Rept. 4508, 1175th Cong. 1 sess. (Government Printing Office, 2017).
- 30 *Ibid.*
- 31 *Ibid.* The House bill defines an earn-and-learn program as an "education program, including an apprenticeship program, that provides students with structured, sustained, and paid on-the-job training and accompanying for-credit classroom instruction that is for a period of between 3 months and 2 years and leads to, on completion of the program, a recognized postsecondary credential."
- 32 *Ibid.*
- 33 Philip Kirby, "Levels of Success: The potential of UK apprenticeships" (London: The Sutton Trust, 2015), available at <https://www.suttontrust.com/wp-content/uploads/2015/10/Levels-of-Success3-1.pdf>.
- 34 *Ibid.*
- 35 *Ibid.*
- 36 House of Commons Committee of Public Accounts, "The apprenticeships programme" (2016), available at <https://publications.parliament.uk/pa/cm201617/cmselect/cmpubacc/709/709.pdf>.
- 37 Philip Kirby, "Levels of Success: The potential of UK apprenticeships."
- 38 Ben Chapman, "Subway advertises for 'Apprentice Sandwich Artists to be paid just £3.50 per hour,'" *Independent*, March 20, 2017, available at <http://www.independent.co.uk/news/business/news/subway-apprentice-sandwich-artists-pay-350-hour-minimum-wage-gateshead-branch-a7640066.html>.
- 39 Sarah Ayres Steinberg and Ethan Gurwitz, "Apprenticeship Expansion in England" (Washington: Center for American Progress, 2014) available at <https://www.americanprogress.org/issues/economy/reports/2014/06/06/91011/apprenticeship-expansion-in-england/>.
- 40 Tom Bewick, "Learning from England's Apprenticeship Expansion," FE News, December 11, 2017, available at <https://www.fenews.co.uk/fevoices/15548-learning-from-england-s-apprenticeship-expansion>.

- 41 Institute for Apprenticeships, "What We Do," available at <https://www.instituteforapprenticeships.org/about/what-we-do/> (last accessed December 2017).
- 42 Helena Pozniak, "The Apprenticeship Levy: the ultimate guide for employers," *The Telegraph*, May 5, 2017, available at <http://www.telegraph.co.uk/education/stem-awards/energy/apprenticeship-levy-employer-guide/>.
- 43 Angela Hanks, "Apprenticeship Programs Are Leaving Out Women and People of Color. Here's How to Fix That," *TalkPoverty*, August 30, 2016, available at <https://talkpoverty.org/2016/08/30/apprenticeship-programs-leaving-women-people-color-heres-fix/>.
- 44 For more on the role of workforce intermediaries, see Daniel Marschall and Ellen Scully-Russ, "Joint Union-Management Workforce Development Model." In David Finegold and others, ed., *Transforming the U.S. Workforce Development System: Lessons from Research and Practice*, (Champaign, IL: Labor and Employment Relations Association, 2010); and Erin Johansson, "Advancing Equity Through Workforce Intermediary Partnerships: Best Practices in Manufacturing, Service, and Transportation Industries" (Washington: Jobs With Justice Education Fund, 2017), available at https://aflcio.org/sites/default/files/2017-11/WFAI_Equity-report_final.pdf.