
ISSUE BRIEF:

APPRENTICESHIP IN NEW JERSEY

BY TIM CASTANO



A workforce-development practice prominently and effectively deployed in international settings, apprenticeship has generated heightened interest in the United States. President Barack Obama has sought to double the number of apprentices within five years, with the United States Department of Labor awarding \$175 million in American Apprenticeship Grants. New Jersey Senator Cory Booker partnered with South Carolina Senator Tim Scott to sponsor the LEAP – Leveraging and Energizing America’s Apprenticeship Programs – Act, which would deliver a federal tax credit to employers who hire apprentices.¹ These efforts seek to fortify weaknesses undermining both the supply and demand sides of the equation: firms reportedly cannot locate sufficiently skilled talent and individuals lack the training to participate more meaningfully in the economy. Updated versions of

Key Points

- Updated versions of centuries-old apprenticeship models could cultivate an adaptable workforce more attuned to the competitive needs of the private sector, while simultaneously equipping citizens with professional proficiencies in a practical, cost-efficient manner.
- With starting salaries above the national average accompanied by durable long-term prospects, apprenticeships help carve a pathway to rebuilding the middle class, an essential component for far-reaching prosperity.
- Potentially replicating successful state programs, New Jersey should build its apprenticeship initiative around three elements: funding; promotion; and technical assistance.

centuries-old apprenticeship models could cultivate an adaptable workforce more attuned to the competitive needs of the private sector, while simultaneously equipping

citizens with professional proficiencies in a practical, cost-efficient manner, results that invariably bolster the middle class. Apprenticeship has ranked highly as a priority in several states, particularly South Carolina. Borrowing from these examples, New Jersey could craft an apprenticeship strategy built on funding, promotion and technical assistance.

Apprenticeships have existed in the United States since the nation's inception. More formally, Wisconsin established the first state registered apprenticeship program in 1911, while Congress enacted the National Apprenticeship Act in 1937.² The modern apprenticeship involves on-the-job training and classroom instruction, leading to an industry credential, with the apprentice earning a salary during the process. Ideally, the sponsoring employer will retain the apprentice upon completion. The United States Department of Labor reports 405,900 apprentices in the nation as of October 2015.³

The elevated attention recently paid to apprenticeship speaks to a structural gap in the economy, a ravine dug by the converging tributaries of unmet employer need and inadequate skills training. According to Bruce Katz and Mark Muro of the Brookings Institution, "Many employers report difficulty filling even the lowest-level advanced-skill jobs. States can fix this by creating apprenticeship and workforce-development programs."⁴ A 2015 survey by the Manpower Group reinforces this observation, as 32 percent of employers in the United States cite a shortage of talent as the greatest challenge in filling vacancies, with individuals in the skilled trades the most difficult to locate.⁵ The trend promises to continue in a problematic direction, as a study by Georgetown University's Center on Education and the Workforce projects a shortage of 4.7 million individuals with certain postsecondary credentials by 2018.⁶

A system that poorly addresses the needs of employers also fails to prepare prospective workers. Those without education beyond high school often find themselves stranded on the wrong side of the proverbial gap, without the tools or the opportunities to work themselves into the middle class.⁷ The costs of acquiring education beyond high school can prove prohibitive in many circumstances, creating the space for a viable alternative through which to enter and thrive in the workforce. Apprenticeship presents one such alternative. As the American Council on Education notes, "Apprenticeships have the dual advantage of offering post-secondary education with little or no accumulation of student debt and the possibility of also earning college credit."⁸

Employers, employees and society overall stand to benefit from apprenticeships. With respect to earnings, evidence points to increased earnings for apprentices by almost \$78,000 fewer than three years following certification as compared to those in a non-apprentice peer group.⁹ Analysis also reveals that apprenticeships accelerate overall career advancement for participants.¹⁰ In terms of an employer's return on investment, one study concluded firms receive \$1.47 for every \$1 devoted to apprenticeship.¹¹ Beyond strict quantification, reports indicate apprenticeship enables employers to enrich and refine a skilled, knowledgeable,

renewable workforce,¹² with one account of German enterprises demonstrating how apprenticeship sparks workplace innovation.¹³

The simultaneous strengthening of employees and employers naturally yields wider societal gains, including lower unemployment among youth, increased economic productivity and the more efficient allocation of government resources, to name a few.¹⁴ Moreover, with starting salaries above the national average accompanied by durable long-term prospects, apprenticeships help carve a pathway to rebuilding the middle class, an essential component for far-reaching prosperity.¹⁵

With the advantages of apprenticeship seemingly apparent, a question remains as to why the initiative has not become more prevalent. The answer, to some degree, relates to history, culture and finances. The United States traditionally has not embraced apprenticeship with the same enthusiasm as other nations. Apprentices comprise around 0.2 percent of the country's workforce, as compared to 2.2 percent in Canada, 2.7 percent in the United Kingdom and nearly four percent in Germany.¹⁶ The neglect of the apprenticeship model at the policy level likely has bred ignorance regarding its effectiveness and, in some instances, a broader sense of inferiority with respect to options exclusive to higher education. By extension, employers in the United States lack information on apprenticeship's potential in serving their own interests.¹⁷

Additionally, apprenticeships carry costs for employers, who engage on a voluntary basis. In Germany, the government funds education-related components of apprenticeships, a feature absent in the United States.¹⁸ As a result, firms could balk at the concept, despite data displaying the favorable returns.

Even when acknowledging inherent challenges, the empirically driven arguments in favor of expanding apprenticeship should prompt at least consideration within New Jersey, a state already housing over 5,000 active apprentices in nearly 900 programs, primarily as electricians, carpenters, plumbers and construction laborers.¹⁹ According to the National Skills Coalition, New Jersey does not produce enough workers for the middle-skill labor market, positions suited for apprenticeship, as they require training beyond high school, although not at the level of a four-year degree. For the remainder of the decade, over 50 percent of the openings in the state will reside in the category of middle-skill, yet only 38 percent of New Jersey's workforce possesses the appropriate qualifications to fill the roles.²⁰ Apprenticeship could address the disparity.

Moreover, apprenticeship could help reorient the state's overall economic profile toward fields rooted in science, technology, engineering and math (STEM), sectors with individual wage growth five-times the rate of other industries.²¹ The Brookings Institution's Metropolitan Policy Program has observed the weakening of New Jersey's STEM foundation since 1980, when the state housed 16 related industries with employment 1.5 times greater than the national average. Today, New Jersey can claim only four such industries.²² Apprenticeships could develop the talent

base necessary for STEM fields to flourish in the state, particularly as 50 percent of the jobs call for less than a bachelor's degree.²³

Several states, including Connecticut, Iowa and Minnesota, have implemented and amplified apprenticeship programs in recent years. South Carolina has distinguished itself as the national leader with Apprenticeship Carolina, which has led to an increase in apprentices within the state from 777 in 2007 to 11,000 today.²⁴ If New Jersey chooses to replicate Apprenticeship Carolina's template or draw on aspects from various states, three elements should govern the design: funding, promotion and technical assistance.

In terms of funding, states have adopted measures to defray certain expenses borne by participating firms. South Carolina provides a \$1,000 tax credit to employers for each apprentice enrolled in a registered program for at least seven months over a maximum period of four years. Several other states, including Virginia, Rhode Island and Tennessee, offer similar tax credits in varying amounts. Angela Hanks and Ethan Gurwitz of the Center for American Progress write, "Direct state investment in apprenticeship can be an important incentive to encourage employer participation."²⁵ An apprenticeship-targeted tax credit by New Jersey could motivate employers to undertake the initiative, while also lending support as the programs advance.

As noted, the lack of awareness around apprenticeship by employers erects a barrier to entry and progress; however, the strategic promotion of the idea has succeeded in scaling such barriers. For example, professional campaigns in the United Kingdom achieved broader cultural acceptance of apprenticeship and an attendant uptick in participation.²⁶ A modest investment by New Jersey to educate employers and the public as to the advantages and mechanics of apprenticeship could help to overcome impediments emerging from misperception.

Regarding technical assistance, Apprenticeship Carolina operates its own agency within state government, a distinction from New Jersey, where the federal Department of Labor's personnel in the state manage apprenticeships.²⁷ Apprenticeship Carolina houses designated Apprenticeship Consultants dedicated to guiding employers through the steps of initiating and maintaining their own programs. South Carolina currently funds five such positions.²⁸ The move by New Jersey to open an office committed to apprenticeship and staffed with professionals available to counsel employers could serve to prioritize and operationalize expansion.

Cost obviously enters into any assessment of a policy's viability in New Jersey; however, apprenticeship does not lead to significant expenses for governments.²⁹ Apprenticeship Carolina's budget totals approximately \$1 million annually. Including the tax credit, the cost-per-apprentice calculation reaches only \$1,250.³⁰ When weighing such expenditures against a more sophisticated talent pipeline for employers, the enhanced abilities and earning potential for citizens and the strengthening of the state's broader economy, apprenticeship recommends itself for inclusion on New Jersey's agenda.

Notes

¹ American Council on Education, “Quick Hits: Revisiting Apprenticeships” (Washington, DC: American Council on Education, 2015).¹

² Keith L. Rolland, “Apprenticeships and Their Potential in the U.S.,” *Cascade*, Winter 2016.

³ Ibid.

⁴ Bruce Katz and Mark Muro, “What States Need to Do to Grow Their Advanced Industries,” *Governing*, December 12, 2014.

⁵ Manpower Group, “2011 Talent Shortage Survey” (Milwaukee, WI: Manpower Group, 2015).

⁶ Anthony P. Carnevale, Nicole Smith and Jeff Strohl, “Help Wanted: Projections of Jobs and Education Requirements through 2018” (Washington, DC: Georgetown University, 2010).

⁷ Angela Hanks and Ethan Gurwitz, “How States Are Expanding Apprenticeship” (Washington, DC: Center for American Progress, 2016).

⁸ American Council on Education.

⁹ Workforce Training and Education Coordinating Board, “2014 Workforce Training Results by Program” (Olympia, WA: Workforce Training and Education Coordinating Board, 2014).

¹⁰ Ben Olinsky and Sarah Ayres Steinberg, “Training for Success: A Policy to Expand Apprenticeships in the United States” (Washington, DC: Center for American Progress, 2013).

¹¹ Canadian Apprenticeship Forum, “It Pays to Hire an Apprentice: Calculating the Return on Training Investments for Skilled Trades Employers in Canada” (Ottawa, Ontario: Canadian Apprenticeship Forum, 2009).

¹² Hanks and Gurwitz.

¹³ Robert I. Lerman, “Expanding Apprenticeship Opportunities in the United States” (Washington, DC: The Hamilton Project, 2014).

¹⁴ Ibid.

¹⁵ Katherine Peralta, “Apprenticeships Could Be a Gateway to Middle Class,” *U.S. News and World Report*, January 12, 2015.

¹⁶ Lerman.

¹⁷ Rolland.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ National Skills Coalition, “Middle-Skill Jobs by State: New Jersey” (Washington, DC: National Skills Coalition, 2014).

²¹ Metropolitan Policy Program, “America’s Advanced Industries: What They Are, Where They Are, And Why They Matter” (Washington, DC: Brookings Institution, 2015).

²² Ibid.

²³ Ibid.

²⁴ Uri Berliner, “In South Carolina, a Program that Makes Apprenticeships Work,” National Public Radio, November 6, 2014.

²⁵ Hanks and Gurwitz

²⁶ Lerman.

²⁷ Rolland.

²⁸ Hanks and Gurwitz.

²⁹ Debbie Reed, Albert Yung-Hsu Liu, Rebecca Kleinman, Annalisa Matri, Davin Reed, Samina Sattar and Jessica Ziegler, “An Effectiveness Assessment and Cost-Benefit Analysis of Registered Apprenticeship in 10 States” (Washington, DC: Mathematica Policy Research, 2012).

³⁰ Lerman.