

Apprenticeship Programs

September 2017



Apprenticeship programs are designed to help workers master a marketable skill, thus enhancing the supply of workers to meet labor demand needs.¹ "Under apprenticeship programs, individuals undertake productive work for their employer, earn a salary, receive training primarily through supervised work-based learning, and take academic instruction that is related to the apprenticeship occupation."² Development of work-readiness skills is critical for teens' and young adults' employment prospects, as evidenced by the bleak employment outlook for young adults entering the workforce without them.³ Educational pathways that provide work-readiness training, such as structured apprenticeship programs, can improve labor force prospects and outcomes for teens and young adults.

A 2012 Mathematica evaluation of ten states finds that individuals who complete a registered apprenticeship program earn an average of \$301,533 more in wages and benefits during their careers than individuals who do not participate in an apprenticeship.⁴ Furthermore, every government dollar invested in apprenticeship leads to \$27 in tax returns and \$35 in total social benefits, including increased tax revenue and reduced costs incurred for social assistance programs, during the course of an apprentice's career.⁵

Apprenticeship Carolina

There are many successful apprenticeship models and South Carolina's Apprenticeship Carolina is one such approach. This youth and adult apprenticeship program combines on-the-job training at the workplace and job-related technical instruction at county community or technical colleges. The program is sponsored by the state's Division of Economic Development and housed within the SC Technical College System (SCTCS).

Youth Apprenticeship Carolina,⁶ the program's high school component, works with sixteen- and seventeen-year-old students, most of whom are on a career trajectory.⁷ Students may select from a range of apprenticeships in the following areas of study: advanced manufacturing; information technology; construction technology; energy; transportation, distribution, and logistics; health care; and tourism and service industries.

SCTCS apprenticeship consultants work with local education and private sector partners throughout the apprenticeship development process, from initial information sessions for parents and students, through the student interview and hiring phase. Students who receive internships are compensated for their work (up to twenty hours per week) in addition to earning course credits. State funding covers the \$1 million annual cost for the program. To entice private-sector participation, employers receive a tax credit of \$1,000 per apprentice.⁸ The total annual budgetary cost for the state per apprentice is roughly \$1,250, including the tax credit.⁹

Anecdotal evidence suggests that students participating in apprenticeship programs have higher high school graduation rates than comparable youth.¹⁰ Although there has been no rigorous evaluation of the Youth Apprenticeship Carolina program's impact on student outcomes, participation has been growing among both companies and students. Since the program's inception in 2007, Apprenticeship Carolina has served more than 14,000 youth and adult apprentices, and had 6,200 active apprenticeships during School Year 2016–17.¹¹ Additionally, the number of employers offering apprenticeships has increased from 90 in 2007 to 876 in 2016, an increase of more than 873 percent,¹² with one in three employers offering apprenticeships in more than one occupation.¹³

Guiding Questions

Policymakers, district and school leaders, and various stakeholder groups must determine how interventions would meet local needs and identify potential challenges to implementation, whether human capital, cost, or political history. Asking the following critical questions is the first step toward addressing these concerns:

- How would the school district initiate and expand effective apprenticeship programs?

Guiding Questions (continued)

- How would the apprenticeship program assess candidate readiness? For instance, would the program rely on industry codesigned and approved assessments matched to entry-level positions at high school completion and/or require an associate's degree?
- On the demand side, who are the most likely employers/employment sectors for high-quality apprenticeship graduates?
- What policy levers must the district activate to entice employers to offer apprenticeship positions?
- How should the programming be marketed?
- Will prospective industries and businesses accept traditionally underserved students as apprentices?
- What role does public perception and politics play in the creation or expansion of high school apprenticeship opportunities?¹⁴
- What are the costs, if any, to state and local school districts?

Endnotes

- ¹ R. I. Lerman, "Proposal 7: Expanding Apprenticeship Opportunities in the United States," *Policies to Address Poverty in America* (Washington DC: The Hamilton Project, 2014), http://www.hamiltonproject.org/assets/legacy/files/downloads_and_links/policies_address_poverty_in_america_full_book.pdf#page=81.
- ² *Ibid.*, p. 1.
- ³ A. Sum et al., *The Plummeting Labor Market Fortunes of Teens and Young Adults* (Washington, DC: Brookings Institution, 2014), http://www.youtheconomicopportunities.org/sites/default/files/uploads/resource/Youth_Workforce_Report_FINAL.pdf.
- ⁴ D. Reed et al., *An Effectiveness Assessment and Cost-Benefit Analysis of Registered Apprenticeship in 10 States* (Oakland, CA: Mathematica Policy Research, 2012), https://wdr.doleta.gov/research/fulltext_documents/etaop_2012_10.pdf.
- ⁵ *Ibid.*
- ⁶ The authors attempted to contact Carla Whitlock, senior apprenticeship consultant for Youth Apprenticeship Carolina, for exact figures and outcomes for the youth component. As of publication, no response had been received.
- ⁷ A. Berube and J. Parilla, "Building One of America's Fastest-Growing Apprenticeship Programs: A Q&A with Brad Neese of Apprenticeship Carolina," *The Avenue* (blog), Brookings Institution, April 7, 2015, <https://www.brookings.edu/blog/the-avenue/2015/04/07/building-one-of-americas-fastest-growing-apprenticeship-programs-a-qa-with-brad-neese-of-apprenticeship-carolina/>.
- ⁸ J. Parilla, J. L. Trujillo, and A. Berube, *Skills and Innovation Strategies to Strengthen U.S. Manufacturing: Lessons from Germany* (Washington, DC: Brookings Institution, 2015), <https://www.brookings.edu/wp-content/uploads/2016/06/LessonsFromGermany.pdf>.
- ⁹ Lerman, "Proposal 7."
- ¹⁰ R. I. Lerman and A. Packer, "Youth Apprenticeship: A Hopeful Approach for Improving Outcomes for Baltimore Youth," *The Abell Report*, 28, No. 2 (2015), <https://eric.ed.gov/?id=ED570918>; R. I. Lerman, "Expanding Apprenticeship in the United States: Barriers and Opportunities," in *Contemporary Apprenticeship: International Perspectives on an Evolving Model of Learning*, ed. A. Fuller and L. Unwin, 105-24 (New York, NY: Routledge, 2013).
- ¹¹ Aiken Technical College, "Apprenticeships Provide Opportunities for Students to Gain Experience, Further Education," press release, November 18, 2016, <https://www.atc.edu/About/News/apprenticeships-provide-opportunities-for-students-to-gain-experience-further-education>.
- ¹² Apprenticeship Carolina, "By the Numbers," <http://www.apprenticeshipcarolina.com/by-the-numbers.html> (accessed May 9, 2017).
- ¹³ A. Hanks and E. Gurwitz, "How States Are Expanding Apprenticeship" (Washington, DC: Center for American Progress, 2016), <https://www.americanprogress.org/issues/economy/reports/2016/02/09/130750/how-states-are-expanding-apprenticeship/>.
- ¹⁴ Lerman, "Proposal 7."

Photo by Allison Shelley/The Verbatim Agency for **American Education: Images of Teachers and Students in Action**

The **Alliance for Excellent Education** is a Washington, DC-based national policy, practice, and advocacy organization dedicated to ensuring that all students, particularly those traditionally underserved, graduate from high school ready for success in college, work, and citizenship. www.all4ed.org

The **Johns Hopkins Institute for Education Policy** (the Institute) believes that building partnerships across different constituencies is necessary to advance excellence and equity for all of America's children. The Institute operates on the understanding that education policy must be informed both by real-world conditions and also by excellent research; that it is possible to translate the technical vocabularies of research into a language that is accessible and useful to policy experts, principals, teachers, and parents; and that in our richly diverse nation, education must be driven and sustained by evidence about what works and what does not. edpolicy.education.jhu.edu/