



ISSUE BRIEF

CAN APPRENTICESHIPS HELP REDUCE YOUTH UNEMPLOYMENT?

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America has a lingering problem employing its youngest workers. In July 2015, the nationwide youth unemployment rate was at 12.2 percent, more than double the general unemployment rate of 5.3 percent.¹ Even worse, the number of disconnected youth—those between ages 16 to 24 who are neither in school, nor working—was at 13.8 percent, or a total of 5.53 million young people, according to Measure of America’s latest report.²

Broken down by race, the numbers are even more troubling. The unemployment rate of black youth is over 20 percent, compared to 10 percent for their white counterparts.³ Similarly, 21 percent of black youth are disconnected, compared to 11 percent of their white counterparts.⁴ If these were the numbers for our general population, the country would be considered to be in an unemployment crisis.

These high rates of unemployment do not come without costs. In 2013, Measure of America

conservatively estimated that the direct cost of disconnected youth for taxpayers was \$26.8 billion due to Medicaid expenditures, public assistance payments, Supplemental Security Income payments, and incarceration costs.⁵

Our high levels of youth unemployment should not be a given. According to my colleague, Mike Cassidy, while our youth unemployment rate has recovered somewhat since the Great Recession, the number still remains historically high.⁶ Because youth unemployment has long-term impacts not only for individuals but also the economy at large, we cannot continue to accept these levels of unemployment and disconnection for youth, especially minority youth, as the norm.

It is clear that our schools and businesses currently are not adequately educating and training our young adults for meaningful employment in the United States. While the labor market and job opportunities may be a part of the problem, the most recent job opening and

This brief can be found online at: <http://apps.tcf.org/apprenticeships>

labor turnover survey showed a net employment gain of 2.7 million jobs over the past year, suggesting that the youth unemployment problem is about something beyond the number of jobs available.⁷ Moreover, numerous business owners and trade associations assert that they have difficulty finding workers to fill their middle-skill job openings.⁸

Therefore, we need a more diverse way of getting youth into careers. In this vein, many policymakers are looking toward apprenticeships, which have proven to place youth into jobs and provide large increases in earnings for participants as well as satisfy the needs of the employers.⁹

Apprenticeships consist of a combination of on-the-job training, contributions by apprentices to production, and classroom instruction, leading to a valued occupational credential. They can be run either by private entities or governmental departments, or a combination of both. They are traditionally associated with certain trades, such as manufacturing and construction (which still dominate the majority of U.S. apprenticeships), but both abroad and here they have been implemented in high-growth fields as diverse as health care, STEM, media, information technology, and hospitality.

Currently, the largest official system of apprenticeships in our country is the Registered Apprenticeship (RA) program, which is run by the Department of Labor and had a total of about 345,000 civilian and 95,000 military participants (just 0.26 percent of the U.S. workforce) in 2014.¹⁰ The RA system is not targeted at youth and the average age of apprentices is 30.¹¹ According to the Department of Labor, the average starting salary of an apprentice is \$50,000 and 91 percent of apprenticeship completers retain employment.¹²

This report looks at how fostering a nationwide apprenticeship system could help to cut youth

unemployment in America, and outlines five criteria to consider when constructing or expanding high-quality programs.

THE BENEFITS OF APPRENTICESHIPS

While there are a limited number of programs in the United States, the evidence that we do have from here and abroad has shown the great potential of apprenticeships.

Although the Department of Labor program is not focused primarily on youth, the overall positive impact suggests that apprenticeships can have a strong impact on the employment of young people. Evidence from abroad suggests that apprenticeships specific to youth have been successful in keeping youth unemployment low. In 2013, for example, Germany and Switzerland—both of which have strong youth apprenticeship systems—had youth unemployment rates of 7.4 percent and 8.5 percent, respectively, among the lowest of the OECD countries.¹³

One of the main benefits is that they function as an “earn-as-you-learn” model, allowing participants to earn a salary as they work toward receiving certifications and credits. This makes such programs more accessible, particularly to youth who have fewer resources. In promoting apprenticeships, the secretary of labor Thomas Perez termed them, “the other college, without the debt.”¹⁴

Selected studies find that apprenticeships increase future earnings for participants. One report conducted by the Department of Labor and Mathematica Policy Research found that the average earnings gain associated with apprenticeship completion was \$14,404 in the sixth year and \$240,037 over a participant’s entire career, when compared to the earnings of nonparticipants.¹⁵

The same report found that, over the assumed thirty-six year career of an apprentice, the net social benefits average to be \$49,427, even under the most conservative assumptions.¹⁶ Washington State's Workforce Board conducted its own study on the return on investment of its different training programs. It found that over participants' entire career the net individual and public benefits of apprenticeships were \$332,432 and \$84,829, respectively—much higher than the net benefits calculated for community and technical colleges, which were \$143,899 and \$31,378, respectively.¹⁷

Apprenticeships require a much smaller investment by the government than community and technical colleges, since employers provide much of the funding to cover apprentices' salary and on-the-job training costs. However, a direct comparison should be avoided, since community colleges work in the same environment as apprenticeships and they can, and often do, provide the in-class educational component of apprenticeship programs. (It is possible that providing free community college, as currently advocated by President Obama and Bernie Sanders, could bolster a youth apprenticeship system if colleges worked closely with companies to create more programs.¹⁸)

For businesses, taking on apprentices comes with its unique benefits. Doing so ensures a skilled worker, reductions in employee turnover, and, usually, a positive return on investment—although this has not yet been sufficiently evaluated in the United States.¹⁹ (A study of apprenticeships in the United Kingdom showed that businesses can expect to make an extra £214 [\$328] in increased productivity per week per apprenticeship completer.²⁰) Moreover, in the United States, multiple surveys of existing apprenticeship programs have shown that very few employers see costs as a problem, and nearly all of them would recommend the program to other employers.²¹

CURRENT EFFORTS TO EXPAND APPRENTICESHIP PROGRAMS

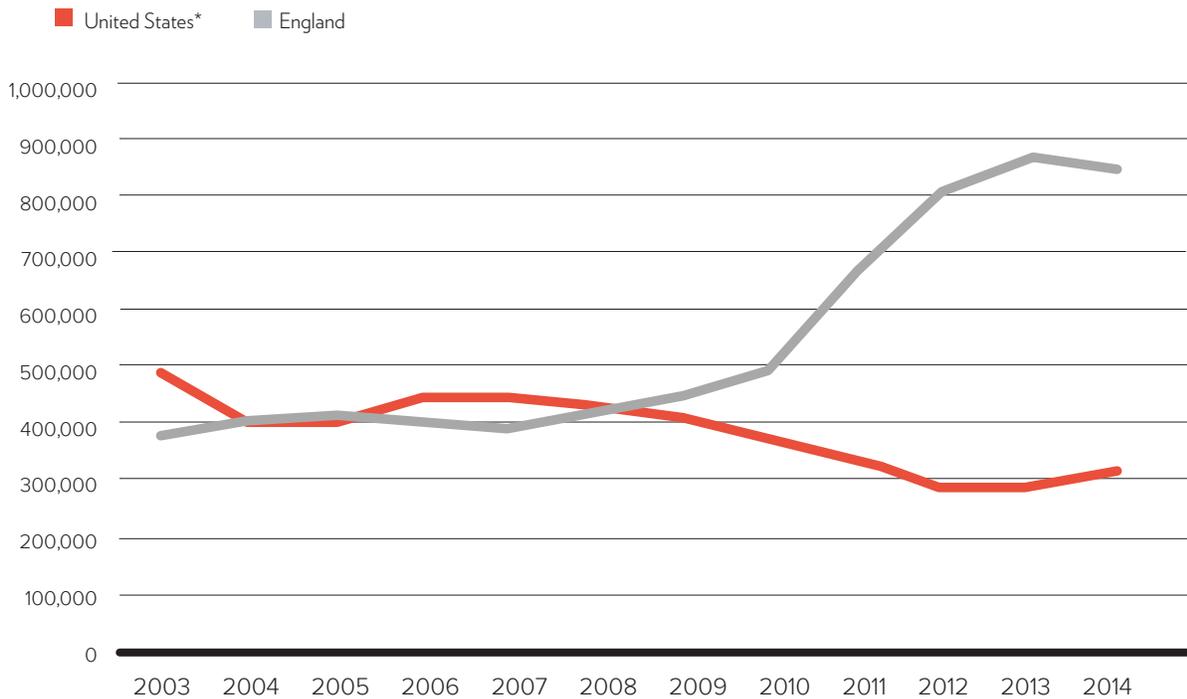
Recently, the Obama Administration made a push for apprenticeships, awarding \$175 million over five years in grants to forty-six different apprenticeship programs. While this initial investment is somewhat modest (the annual budget for Job Corps alone is \$1.7 billion), developing quality apprenticeship programs can set an important precedent for future investment.²²

The application guidelines for these grants reveal that the administration is attempting to do just that, by taking steps to address gaps in quality that have historically plagued the Registered Apprenticeship system. The goals that the Department of Labor outlined for applicants include increasing apprenticeship opportunities for underrepresented and low-skilled populations, aligning apprenticeships with university systems, and engaging employers. The Department of Labor is also requiring programs to report individual record-level data, which will be a boon for a system that has typically kept records that are scattered and disjointed.²³ In addition, Department of Labor has issued a request for proposals to evaluate the grants.

Clearly, government mandates and financial contributions matter. Examples from England, South Carolina, and Wisconsin show that, with government support, apprenticeship expansion can be achieved. In 2009, England made a concerted effort to increase the number of apprenticeships in order to combat youth employment, creating the National Apprenticeship Service, an agency solely dedicated to apprenticeship programming. Between 2009 and 2014, the number of active apprentices in the country nearly doubled, from 444,800 to 851,500.²⁴

While the program in South Carolina is not explicitly targeted at youth, the state government has made an aggressive push, increasing the number of newly

FIGURE 1
APPRENTICESHIPS IN ENGLAND VS. THE UNITED STATES



Note: *Does not include U.S. Military Apprenticeship Program (USMAP)

Source: U.K. Skills Funding Agency, FE Data Library U.S. Department of Labor, Office of Apprenticeship

registered apprentices from 777 to 8,000 since 2007. Moreover, there has been a 570 percent increase in employer participation, from 90 to over 750 companies coming on board.²⁵ Wisconsin also has pursued similar growth in its youth apprenticeship system. In 1994, there were only 348 youth apprentices working for 200 different employers in Wisconsin. The program grew to 3,393 apprentices and 2,336 employers in 2002, but due to drops in funding, there are currently 2,549 apprentices and 1,801 employers.²⁶

CONCERNS ABOUT EXPANDING APPRENTICESHIPS

While it is clear that, with dedicated government support, it is possible to rapidly increase the number of apprentices, some observers remain wary. These concerns are not unfounded—while the benefits listed

above reveal the great potential of apprenticeships, many still remain apprehensive.

First, historically, much of the vocational training in the United States has been associated with tracking and segregating minority and working-class students into a form of low-quality education. In general, opponents of vocational training have traditionally cited fears that such training would track disadvantaged students into low-quality programs and away from higher education.²⁷ These fears date as far back as the Smith-Hughes Act of 1917, which created a separate fund and curriculum for vocational training, supplanting general education and paths to college for children from working-class families.²⁸ Critics saw this system as rigid and inflexible, working against upward mobility for students who were being funneled into agricultural and factory jobs. While

evidence for these critiques has only been applied to school-based vocational and educational training (VET) and not to apprenticeships, fears of the former can hold back support for the latter.

Another concern about apprenticeships that has been raised is the historical lack of gender diversity. For example, of the apprentices studied in the Mathematica Policy Report, 91 percent were male and 68 percent were white.²⁹ However, this mainly applies to the construction industry. In England, where there has been a great expansion of occupational diversity in apprenticeships, more than 52 percent of apprenticeship starts in 2014 were female. It should be noted though that these women are disproportionately employed in lower-wage occupations, according to a Center for American Progress report.³⁰

If program designers are to avoid these concerns and garner support by government and businesses to expand apprenticeships, they should keep these apprehensions in mind. On the other hand, worries about creating equitable programs should not ignore certain realities on the ground. For example, currently, only half of high school graduates from the bottom quintile attend college.³¹ Moreover, one study showed that while 58 percent of students in the bottom quartile expect to get a bachelor's degree, only 14 percent actually receive one.³² So, there is a real need for additional educational opportunities for students from low-income backgrounds. Opening up a robust educational path that will ensure a job for students who may struggle to attend or pay for college could greatly benefit a large number of youth. To this end, this brief will outline five criteria that would help to guard against apprehensions of apprenticeship programs.

WHAT CRITERIA SHOULD BE FOLLOWED FOR IMPROVING AND EXPANDING OUR YOUTH APPRENTICESHIP SYSTEM?

1. Are programs integrated with the existing education system?

Apprenticeships are an educational experience, and should be recognized as such. Rather than keeping apprenticeships separate from general education, policymakers should look toward how the apprenticeship model can be integrated with the current system of education delivery through colleges and universities.

Other nations have already done this, with good results. In Switzerland, for example, over two-thirds of students enter what is termed a “dual-system” apprenticeship in which the main part of their week is spent on the job and the other part in school. The system is often lauded for its permeability between its academic and vocational counterparts. One report states that in Switzerland, “typically, learners may pursue education and training opportunities and later change the course of their professional lives with relative ease.”³³ One component of this dual system is the vocational baccalaureate, which students can work toward at the same time as their apprenticeships, and which enables direct admission to a university of applied sciences.

In order to reach this type of flexibility in the United States, apprenticeship paths should have multiple points of entry and exit. The Urban Technology Project (UTP) in Philadelphia is a good example of a program that is successful in this regard. UTP focuses on providing long-term, holistic support for urban youth involving a continuum of service-learning

and school-to-work experiences for its participants. The program fosters early interest in technology by offering a forty-hour course for middle-school students and after-school clubs and summer programs for high school students. Upon graduation, UTP runs a one-year information technology pre-apprenticeship AmeriCorps program in which students work toward multiple industry-recognized certifications. After completion of the program, students can apply to enter a two-year registered apprenticeship providing technical support to Philadelphia school districts. They can also choose to utilize their AmeriCorps Segal Education Award (worth \$5,730) to study part time while in an RA or enter full-time into higher education, with a year of training and experience under their belt.³⁴

The majority of UTP apprenticeship graduates have gone on to work at annual starting salaries between \$35,000 and \$55,000, while others have started their own businesses. Over 60 percent have attended two to four year colleges. The school districts themselves have saved \$900,000 in technical support.³⁵ Whatever their direction, students in UTP have a variety of options at multiple stages of their education.

2. Do programs encourage greater engagement from businesses?

Businesses are essential partners to any youth apprenticeship system. Making it easy can stimulate businesses to hire apprentices. In South Carolina, for example, the state offers a \$1,000 tax credit for each registered apprenticeship employers hire. Senators Cory Booker, Tim Scott, Susan Collins and Maria Cantwell have emulated this idea on a federal level by introducing bills to encourage firms to hire apprentices. One proposal, the LEAP Act, offers a \$1,000 tax credit to businesses for hiring new apprentices and \$1,500 for hiring apprentices under the age of 25.³⁶

While a tax credit can help convince businesses to utilize or even start apprenticeship programs, policymakers

should also encourage deeper engagement. In Switzerland, there is no financial incentive offered to businesses for hiring apprentices—companies invest in the system because they recognize the value to their workforce. While the culture of private industry will not change overnight, a marketing campaign that increases awareness of the benefits of apprenticeships would help greatly. Both England and South Carolina, for example, invested in marketing outreach in order to increase the number of businesses offering apprenticeships.

State and federal officials should also make an effort to expand apprenticeships to new industries that may not be familiar with the model. Many of the program directors contacted during research for this brief asserted that they had not yet found an industry where apprenticeships did not work. Wisconsin's youth apprenticeship system is a good example of how the model appeals to a wide variety of sectors. While roughly a quarter of Wisconsin's youth apprenticeships are in traditional fields such as manufacturing and construction, the rest are in a variety of industries, such as health services, STEM, finance, agriculture, and hospitality.³⁷

There are also many additional ways that employers can be brought on board to engage with an apprenticeship system. For example, companies can help to develop standardized skill competency goals for apprenticeship programs within their industry. Employers can also help create pre-apprenticeship programs to prepare youth for further career exploration. One example from the Wisconsin experience is Promega, a biotechnology firm in Madison that helped to develop a pre-apprenticeship for local high school students, including creating the curriculum for a course on lab basics.

Businesses can also use apprenticeship programs to actively improve the culture of their workforce. Take Microsoft, which supported the creation of an apprenticeship run by the Washington Technology

Industry Association in order to amend the low representation of females and minorities in its labor force.

Most importantly, states, educators, and program advocates should emphasize to businesses the benefits that apprenticeships can have for their workforce. It is essential that more employers extend apprenticeship offers for the system to expand.

3. Are programs accessible to students who would benefit most?

For apprenticeships to significantly reduce youth unemployment, poor, minority, female, and disabled youth cannot be locked out of participating in apprenticeship programs.

Currently, many barriers to entry exist for apprenticeship programs. For example, despite the fact that women surveyed in the Mathematica Policy Research report asserted that they saw registered apprenticeships as a door to better pay and career advancement, they also cited obstacles, such as child care expenses, as prohibitive to participating in apprenticeships. This is especially important since one in three female disconnected youth are mothers.³⁸

Many apprenticeships require long work hours on top of classroom time. This is where a more robust set of government-provided family welfare benefits, such as paid family leave, child-care benefits, universal pre-K, and child allowances, could help open doors to apprenticeships for young parents.³⁹

Other barriers to apprenticeships that poor youth face can include prohibitive transportation costs and lack of safe housing. Partnering with existing social service organizations can help apprenticeship programs address these issues. For example, the Washington Technology Industry Association is developing a

registered apprenticeship program that is targeting those normally underrepresented in the tech sector—low-income, minority, and female populations. In doing so, they are partnering with Goodwill, which already works with the community to provide social services such as bus fare and daycare services.⁴⁰

A large number of disconnected youth have criminal records, with one in four black high-school dropouts spending time behind bars. According to NAACP, jail reduces the work time of youth over the next decade by 25 to 30 percent, in comparison to arrested youth who were not incarcerated.⁴¹ Initiatives such as Ban the Box, which eliminates questions about criminal record history on job application forms, should be implemented in apprenticeship hiring practices.

These are only a few of the difficulties that youth can face when seeking to participate in apprenticeship programs. Government policy and program designers should be aware of these obstacles and work actively to make sure apprenticeships are accessible to those who could benefit most from them.

4. Do programs establish portable certification to ensure future earnings?

Apprentices who invest time and money in training programs should have assurance that their efforts will pay off in the future. In its basic nature, the apprenticeship model is setup to have this advantage—since businesses who hire apprentices are training workers for the competencies they need, apprentices are ensured relevant and marketable skills. Moreover, many businesses invest in apprentices with plans to hire them in the future, so for many program graduates, a job is pretty much guaranteed (in Wisconsin, 84 percent of youth apprentice graduates were offered employment by their employers).⁴²

Apprenticeship programs can improve participants' access to local jobs, but this does not mean that

all program completers will therefore have higher earnings, because their skills might not be transferable and marketable. For example, while the Department of Labor already gives out certificate of completions to RA completers, as Sarah Ayres Steinberg notes in a Center for American Progress report, this certificate does not ensure portability since components of apprenticeship training can vary between states and employers.⁴³

The solution, Steinberg asserts, is to create apprenticeships that are developed by a consortium of employers, which give out standardized industry-recognized certificates. In doing this, graduates of apprenticeship programs would be ensured the recognition of their skills no matter where they go. In order to convene stakeholders to develop these guidelines, Steinberg suggests using federal grants to leverage private investment by industries.

5. Do programs collect data for more research?

One thing that U.S. apprenticeship programs currently suffer from is a deficiency of longitudinal data. Federal RA records collected in the Registered Apprenticeship Partners Information Data System (RAPIDS), for example, only have information on thirty-three states, and many individual programs do not keep data more than a few years after completion.⁴⁴

One of the main reasons for this is the lack of a unified method of collecting data since apprenticeships are administered by both states and the federal government. As one Center for American Progress report notes, “State apprenticeship agencies frequently fail to collect meaningful data on their apprenticeship programs. Those that do collect data often do not report this data to the Department of Labor or the Bureau of Labor Statistics for analysis.” The authors of the report reached out individually to every state apprenticeship office as well as the Department of Labor’s Office of Apprenticeship, but found that many

pieces of data were unavailable. Even the RAPIDS data that does exist is not available for public viewing, making it difficult for others to conduct research on programs.⁴⁵

For apprenticeship programs to be well-designed and effective in reducing unemployment, more cohesive data needs to be collected in a coordinated manner on participants’ future earnings, program completion rates, employer return on investment, and participant demographics. Programs should also consider measuring other factors, such as employee turnover rate, well-being of mentors, and accessibility of the program to low-income and minority populations. The Department of Labor requires American Apprenticeship grantees to collect a few of these metrics, but leaves many as optional measurements. Without comprehensive data, programs cannot be reviewed holistically.

A good example of an initiative by the Obama Administration that accomplishes this sort of data collection is the Department of Education’s new College Scorecard. The Scorecard publishes records that include the price of tuition, median loan debt of students, completion rates, and labor market outcomes, such as short-term and long-term earnings of students (regardless of program completion).⁴⁶ Not only does the Department of Education aggregate all of this data in one place, it also makes it extremely accessible to the public, which allows outside researchers and policymakers to utilize the information for their own evaluations. This initiative could be a great model for data collection of Registered Apprenticeships, especially if the system expands in the future.

CONCLUSION

Our country’s high unemployment levels clearly show that the current model of learning is not serving all youth, and underscore the need to investigate additional

educational options, such as youth apprenticeships. However, expanding our current programs so that they approach a nationally recognized system will not happen overnight. Current federal expenditures and state legislation merely scratches the surface when it comes to funding and assuring the quality of an in-depth youth apprenticeship system.

Nonetheless, with the existence and creation of more high-quality, successful programs, more stakeholders will get on board. The Obama Administration's investment in a number of programs across the country is a good step toward making the apprenticeship model more visible for businesses, educators, and students. Moving forward, program designers should keep in mind the criteria outlined here in order to combat objections to apprenticeships.

For businesses who lament a lack of a skilled workforce, a national youth apprenticeship system could be helpful. For the one in seven youth neither working nor in school, it could be revolutionary.

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- 46 “Better Information for Better College Choice and Institutional Performance,” Department of Education, September 2015, <https://collegescorecard.ed.gov/assets/BetterInformationForBetterCollegeChoiceAndInstitutionalPerformance.pdf>.