

The apprenticeship system is evolving to meet the needs of today's—and tomorrow's—economy. The two significant goals that have emerged involve broadening the roles of apprenticeship partners and increasing college credit earned through apprenticeships. Community colleges are natural partners in these efforts because apprenticeship programs offer a way to stay relevant to the future of work and education at a time of declining enrollment in technical programs.

Consequently, there has been a surge in community college involvement in apprenticeships. But while colleges have established new programs and taken on new apprenticeship roles, little has been documented or tracked at a national level. What do community colleges know about apprenticeship and what questions remain? How are they already involved? What innovative practices should be shared with community colleges new to apprenticeship?

This brief provides preliminary lessons about community college involvement in apprenticeship collected through a survey and select interviews from 38 colleges that are workforce development leaders (see Appendix A for methodology and respondent profile). Community colleges are off to a great start. Many are already involved in delivering apprenticeships recognized by the Department of Labor's Office of Apprenticeship or by a State Apprenticeship Agency. They also demonstrate how community colleges can impact diversity in apprenticeship programs, and the support they would need to do it. Even more exciting than their current engagement is community colleges' widespread interest in expanding their apprenticeship roles, particularly in nontraditional occupations. To get there, colleges need support in addressing key questions and barriers around employer engagement and funding. These innovations and remaining concerns can serve as a guide for technical assistance and support to community colleges as a strategy for scaling and diversifying apprenticeship.

What is Apprenticeship?

Apprenticeship is model of workforce training that allows employees to earn while they learn. These programs generally last from one to six years and include a combination of on-the-job training and formal classroom instruction. Registered apprentices earn progressively increasing wages and an industry-recognized credential. Apprenticeships can be overseen either by the U.S. Department of Labor's Office of Apprenticeship or by a State Apprenticeship Agency, while employers and other sponsors administer individual apprenticeship programs.

Visit the U.S. Department of Labor and read Training and Employment Guidance Letter 13-16 to learn more about apprenticeship.

Current Apprenticeship Activity in Community Colleges

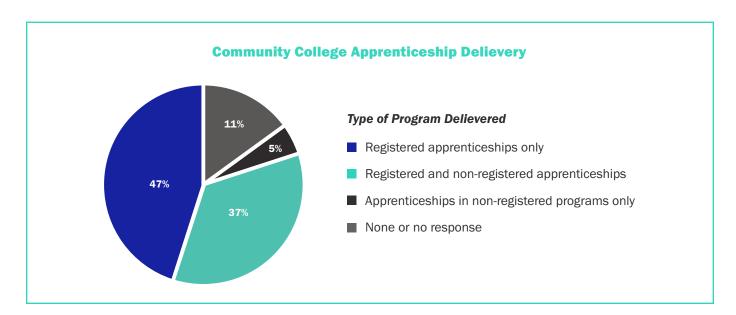
Community colleges are becoming increasingly active in developing and delivering apprenticeship programs. As part of an effort to expand apprenticeship to a wider range of stakeholders and better connect it to existing educational and training opportunities, the U.S. Department of Labor launched the Registered Apprenticeship College Consortium in 2014. This fast-growing network of approximately 350 colleges across 46 states demonstrates this shared interest. However, it is unclear how that interest translates into the individual practices of community colleges nationwide.

Of the 38 colleges responding to the survey, 84 percent participate as a partner in an apprenticeship program (Table 1). The most common role is as a related instruction provider—nearly three-quarters of respondents provide related instruction for at least one apprenticeship program sponsored by another organization. But community college sponsorship, almost unheard of a few years ago, is also becoming more common. Half of the college respondents reported being a current sponsor for a registered apprenticeship program. Community colleges are delivering these apprenticeship programs with a range of employer partners. While apprenticeships have a reputation as a predominantly union strategy, community college programs represented in the survey results are far more likely to serve non-union partners (52 percent), rather than union-

affiliated ones (4 percent). Another 44 percent serve both union and non-union groups. Appendix B provides detailed tables of these activities and other survey results.

Community colleges are well positioned to maximize the academic credit and associate's degrees earned through an apprenticeship program. Two-thirds of responding colleges operate apprenticeship programs from academic departments on the credit side of the institution, while only 11 percent are located within the noncredit or continuing education division. The remaining colleges operate apprenticeship programs jointly with both credit and noncredit departments. In addition, 70 percent provide related instruction for individual apprentices in traditional college occupational courses where there is not a critical mass for a cohort.

The interest among community colleges in academic credit has also translated into another strategy to align degree and apprenticeship programs: Over threequarters (78 percent) of respondents have cross-walked apprenticeships with college-credit programs toward a degree (e.g., accepted instruction and on-the-job training from apprenticeship programs into degree programs), allowing students to work towards multiple credentials simultaneously. More work can be done to support this strategy: 23 percent of respondents say accepting priorlearning credit into a college-credit program is a major challenge. Community colleges also have the potential to apply a similar strategy to industry certifications. Although only 35 percent of respondents have cross-walked with an industry certification, a majority of respondents (57 percent) are interested in building such credentials into their programs.



Poised to Increase Apprenticeship Diversity

Historically, apprenticeships have predominantly served white men, and diversity remains a challenge. Only 6.8 percent of new apprentices in federally administered programs in 2016 were women and approximately one-third were people of color. In addition, the average starting age of an apprentice is 28. Community colleges are poised to increase the diversity in apprenticeship programs, but face multiple challenges.

Community colleges often serve local communities that may otherwise be overlooked by employers recruiting on their own. Overall, community colleges serve a majority of nonwhite students (52 percent of credit students are nonwhite), attract students from a wide range of ages (51 percent of credit students are over 21), and serve substantial numbers of disabled individuals (12 percent of credit enrollments). Because of these student demographics, businesses interested in diversifying their workforces can leverage their relationships with community colleges to increase the number of people of color, women, young workers, and other underrepresented groups in their ranks. Yet, colleges often have limited control over the student population enrolled in apprenticeship programs. with close to half of respondents indicating that employers or unions independently select apprenticeship candidates. Approximately 30 percent report that they "sometimes" have opportunities to select apprenticeship candidates. with less than 30 percent saying that the college handles candidate selection most of the time.

While employers or unions often choose participants for college apprenticeship programs, over 70 percent of colleges surveyed report that employers have asked about diversifying their apprenticeship- training programs. Some colleges work with outreach partners, such as Goodwill Industries and churches, to reach underrepresented populations. Despite these efforts, community colleges often have trouble meeting employer interest in connecting underrepresented populations to apprenticeship. Survey respondents indicate that their apprenticeship student population is comprised of proportionately fewer women, people of color, and people with disabilities than the college overall. Veterans enrolled in apprenticeship programs were proportionate to the overall college population of veterans.

The two greatest challenges in supporting underrepresented student populations in apprenticeship programs relate to attracting students to these opportunities. Seventy percent of respondents to this question cite a lack of career or industry awareness among prospective students, and 52 percent point specifically to recruiting underrepresented populations. Fifty-seven percent of the colleges are "very interested" in learning more about methods to recruit underrepresented candidates to meet employers' need for a more diverse workforce. In addition, one college points out that its diversity challenges do not end with enrollment: "We could use some assistance finding ways to support employers to grow their retention of people of color in apprenticeships. They have a poor record of retaining those individuals." Equity strategies should address the full experiences of apprentices—from initial outreach through job stability and career advancement.

DIVERSITY STRATEGIES AT GRAND RAPIDS COMMUNITY COLLEGE

Grand Rapids Community College (GRCC) serves a community notable for a rapidly diversifying population, with 40 percent of its population in 2014 consisting of people of color, double the proportion from 1980. Although Grand Rapids has a low unemployment rate of 2.9 percent, some minority neighborhoods have unemployment rates as high as 25 percent and have not substantially benefited from the economic recovery. This inequity is apparent in the local healthcare industry, with limited diversity in its technical professions. Facing these challenges, Mercy

Hospital and other employers approached GRCC for support in diversifying their health care workforce, with an initial focus on medical assistants. Specifically, they sought to recruit and break down barriers to increase the number of African-Americans, Hispanics, and males in that occupation.

In 2015, GRCC began developing a medical assistant apprenticeship program to meet the needs of its employer partners. The first apprenticeship cohort, launched in early 2016, struggled to recruit diverse candidates. Of the 18 individuals recruited for the

program, 14 were white and only three were men. This was more diverse than the open enrollment medical assistant program at GRCC, of which 98 percent of the participants from 2013-2015 were white women. In one year, with extensive outreach and education about burgeoning health care opportunities, GRCC dramatically increased the diversity of its apprenticeship. When its second cohort started in early 2017, just under half of the 15 new apprentices were white.

GRCC relies on a wide range of partners to support its outreach efforts. Its nonprofit partners are trusted in their community and include the Urban League, Hispanic Center of West Michigan, the West Michigan Academy of Arts and Sciences, West Michigan Hispanic Center, and Steepletown Neighborhood Services. In addition, Michigan Works!, the local public workforce agency, features the medical assistant apprenticeship its diverse client base of jobseekers.

As the community college prepares for its next cohort, Julie Parks, executive director of workforce training for GRCC, notes that this partnership strategy "is paying off. We have the most diverse field of candidates for the medical assistant apprenticeship to date."

GRCC's health care efforts extend beyond a single occupation. By participating with a foundation-funded study of "economic inclusion" in Grand Rapids and learning about Mercy Hospital and other health care employers' diversity interests, GRCC has strategically positioned itself to bridge the need for opportunity in predominantly minority neighborhoods with the health care industry's interest in a diverse workforce. "This not only benefits individuals, but it benefits employers and our community," says Parks. "Those who do not get into the medical assistant apprenticeship will have other health care apprenticeship opportunities when we launch sterile processing technician apprenticeships this year."

Expanding Apprenticeships at Community Colleges

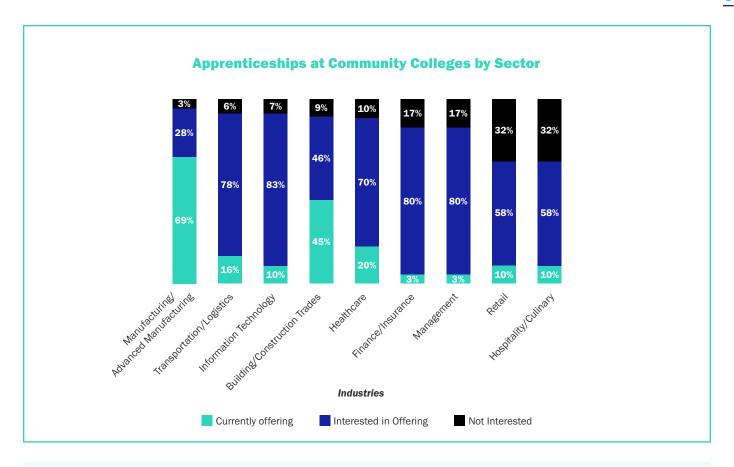
Almost 80 percent of survey respondents who do not yet sponsor apprenticeships with USDOL's Office of Apprenticeship or by a State Apprenticeship Agency are interested in becoming a sponsor. In many cases, this can build upon existing community college programming. Forty-two percent of responding colleges already engage in other types of apprenticeship programs, including 5 percent with no involvement from USDOL's Office of Apprenticeship or by a State Apprenticeship Agency. The growth of apprenticeships in new industries holds particular appeal to community colleges. However, the responding colleges express a need for support in employer engagement and securing funding in order to step into new roles with apprenticeship.

Looking Toward Non-Traditional Sectors

Traditionally, the construction trades have been anchor industries for the apprenticeship system, and they still account for over a quarter of active apprentices in

federally recognized programs. Manufacturing has also enjoyed a smaller but longstanding apprenticeship history. Over the past several years, with leadership from the federal government and interest from employers, new apprenticeships are gaining momentum in information technology (IT), health care, transportation, finance, and other sectors.

Community college participation in apprenticeship largely mirrors these overall trends (Table 2). Forty-five percent of respondents participate in construction trades apprenticeships either as a related instruction provider or sponsor, while 46 percent are interested in playing one of those roles. An even greater share of community colleges are engaged in manufacturing, with 69 percent already involved in apprenticeship programs in the sector and another 28 percent interested. Health care and transportation/logistics are the only other two sectors with over 10 percent of respondents engaged, at 20 and 16 percent, respectively. Both also have high levels of interest for new engagement among community colleges. Over 75 percent of survey respondents also express interest in exploring the emerging apprenticeship sectors of IT, banking/finance, and management.



NORTH CAROLINA'S EXPANSION OF APPRENTICESHIPS WITHIN THE IT SECTOR

The North Carolina Community College System and its individual colleges have been working to expand apprenticeships into nontraditional sectors by repackaging many existing college assets, and making these resources more readily available to employers in new apprenticeship fields. Matthew Meyer, assistant vice president of educational innovations for the North Carolina Community College System, describes what this has looked like in one high-demand industry. "The IT training programs were already in place at our colleges, and we know that skilled IT jobs are growing rapidly in many North Carolina regions, so we are focusing on building the industry awareness that apprenticeship strategies work in the IT sector." In particular, this work leverages the partnership of several community colleges in the Research Triangle area with Cisco and its business partners. These colleges are training approximately 38 newly hired network technician apprentices in a regional industry consortium strategy that the state aims to expand across North Carolina and in other IT occupations like cybersecurity. The next stage is to convene leaders from the state's IT businesses to both listen to their

needs and connect them to an IT industry leader from Silicon Valley, who will share the business benefits of apprenticeship. "Industry listens to industry, and we plan to let industry do the talking while we listen," Meyer notes.

State-level changes to the apprenticeship system will build on this momentum for a broad range of industries. In April 2017, the state legislature moved the state apprenticeship office from the North Carolina Department of Commerce to the North Carolina Community College system office. The eight regional apprenticeship representatives who work directly with employers to develop new apprenticeship programs will soon collaborate with and cross-train community college program leaders to work directly with employers. This will dramatically increase the capacity of the state's 58 institutions to develop apprenticeship solutions to address business problems. "Within the community college system," Meyer notes, "we now have added to our toolbox of workforce solutions, including apprenticeships, to better meet the needs of the state's employers."

Supporting Community College Apprenticeships Through Employer Engagement

Employers are central to the design, delivery, and success of apprenticeship programs. Apprenticeship programs are specifically intended to meet the skills needs of employers and their industries overall. Moreover, if they serve as a sponsor, employers hire apprentices, pay their wages, and are responsible for their on-the-job learning. Community colleges cannot effectively develop and implement apprenticeship programs without the active buy-in of employer partners. Yet, community colleges often struggle to gain traction with employers around apprenticeship programs. One college even notes that "our biggest challenge is employer buy-in on the option [of] apprenticeship used as a means of training."

One college's challenge to "get employers to be the driving force in seeking and developing apprentice programs" reflects the concerns of many survey respondents. Two

employer engagement challenges rank among the top three of 13 potential challenges assessed by survey respondents. Topping the list, 42 percent of the community colleges have difficulty getting employers to invest resources in apprenticeship programs. One rural college notes that its most difficult challenges are with "employer time, money, and resistance to what may be perceived as practices of more unionized shops." One quarter of respondents identify the broader challenge of gaining employer participation in training program design and delivery.

Community colleges are seeking ways to better attract employer sponsors. Sixty-one percent of respondents indicate they are very interested in learning such strategies, making it the top choice among 10 possible learning topics in the survey. This suggests that while employer engagement is a popular technical assistance topic in the apprenticeship field, some of the lessons may not be reaching community colleges, or are not tailored to their needs.

HOW HARPER COLLEGE ATTRACTS EMPLOYERS

With the launch of its insurance apprenticeship program in 2016, Harper College in Palatine, Illinois became one of the first community colleges to sponsor a registered apprenticeship program. Harper College has continued to innovate, expanding to four programs and leading community colleges in apprenticeship engagement. Rebecca Lake, the college's dean of workforce and economic development, points to three strategies that help the college secure strong employer partnerships for these programs.

1. Become a program sponsor.

As an apprenticeship sponsor, Harper College handles all the documentation and administrative requirements of the U.S. Department of Labor. Administrative burden is often cited by employers as a major disincentive to starting an apprenticeship program. By shouldering the responsibility for sponsoring and operating the program, Harper makes it much easier for the employer to sign up and focus on its critical role.

2. Hire staff with industry knowledge.

The college employs several outreach specialists, some of whom are retired from the manufacturing sector. These specialists provide guidance to employers on the benefits of the apprenticeship model and help them navigate concerns about cost and the potential for credentialed employees to leave for new opportunities.

Maximize student success.

Ultimately, employers want to support programs that strengthen their workforce. Harper helps companies identify talent by sending them apprenticeship applications from qualified and interested students. The college also features its student support services to employers to show the added value of working with a college partner. Harper screens applicants and supports apprentices from start through hire with a range of services including intensive student counseling. Employers can see the final results: Harper's apprentices have an average GPA of 3.61, and retention rate of 84 percent in their program.

Securing Funding for Apprenticeship

Community colleges' employer engagement goals are interconnected with their need for resources to support apprenticeship programs. Costs and options for apprenticeship programs are slightly different than traditional classroom programs, and without the proper funding, community colleges cannot expand their apprenticeship offerings. Yet, funding challenges are among the biggest barriers that colleges face.

Survey respondents ranked two types of funding concerns among the most difficult of 13 challenges. In addition to the lack of employer investment described above, one-third of community colleges have trouble finding funding to support noncredit training or to maintain affordable tuition rates. In parallel to these challenges, community colleges are interested in learning more about specific solutions. Fifty-seven percent of colleges would like to know more about leveraging Workforce Innovation and Opportunity Act funding for apprenticeship programs. The same share of colleges would like to learn about state and federal policies and incentives for apprenticeship programs.

Advancing Apprenticeship at Community Colleges: Four Focus Areas

While the survey respondents represent a small percentage of community colleges that are active in delivering apprenticeships, these findings provide a window into the potential role of schools in expanding and diversifying apprenticeship, as well as the support they need to achieve these goals. Based on the experiences of these colleges, we recommend that organizations partnering with community colleges focus their apprenticeship technical assistance and capacity building efforts on several areas:

 Support robust outreach, recruitment, and retention of underrepresented apprentices. Build college capacity to identify and partner with trusted community-based organizations that have access to populations that are underrepresented in apprenticeship. This can also help the 54 percent of colleges interested in learning about recruiting new apprentices overall. Specific fieldbuilding activities could include creating college-specific community asset-mapping tools, fostering peer-to-peer support networks, and advancing college strategies that increase apprenticeship completion rates and further career advancement among these populations.

- Focus on establishing apprenticeship programs in non-traditional occupations where college interest is greatest, such as IT, banking/finance, and management. Apprenticeship representatives, business services staff, and other intermediaries who are working with employers in these industries can pair interested employers with community colleges that already offer relevant degree programs. National intermediaries and apprenticeship leaders can disseminate new apprenticeship program standards and related instruction curricula to community colleges as they emerge, giving colleges a better starting point to develop their own programs in these industries.
- Tailor effective employer engagement strategies
 to a community college audience. While employer
 engagement resources are increasingly available for
 an apprenticeship system, community colleges are still
 looking for solutions. Potential topics for new employer
 engagement tools include articulating a business case
 for apprenticeship and diversity, utilizing consultative
 sales methods to engage business leaders, and
 apprenticeship design strategies that make it easier for
 employers to sign up.
- Develop community college organizational capacities to enhance and sustain apprenticeships. Even among community colleges that lead the country in workforce development, there are many questions about apprenticeship, barriers to implementation, and room for growth in delivering apprenticeship programs in a range of industries. Organizations interested in growing apprenticeship should deeply engage community colleges to better articulate the value and academic integrity of the apprenticeship model, securing leadership buy-in. In addition, coaching and other capacity building can help colleges continue to align apprenticeship programs with college-credit and industry certification programs, enabling them to leverage renewable program resources, recruit qualified faculty, and respond to individual implementation challenges.

These findings and recommendations are an early step in better supporting the expansion of apprenticeships in the community college system. A more comprehensive snapshot of existing activities will provide a range of best and promising practices that could be readily disseminated and adapted by interested colleges. In the meantime, employers and other apprenticeship leaders can work with their local community colleges to leverage their educational expertise and attract their highly qualified students to become the next, new apprentice.

Appendix A: Methodology and Respondent Profile

JFF designed an online survey to yield information about how community colleges organize and deliver apprenticeships and to identify technical assistance needs, especially related to diversity and inclusion in apprenticeships. The survey was initially developed to improve JFF's apprenticeship technical assistance available to the Community College Workforce Consortium, a network of 25 community colleges in 15 states that are national leaders in workforce development. JFF then expanded the survey universe to the approximately 350 additional members of the U.S. Department of Labor's Registered Apprenticeship College Consortium. The online survey was conducted in spring 2017, with 38 colleges responding. This represented a 60 percent response rate among CCWC colleges and another 23 responses from other RACC colleges.

The survey had the option of anonymity, but respondents could also indicate if they were open to follow-up communication. Phone interviews were conducted with three respondents to gather more detailed insight into how the activities indicated in the survey translate into community college programs and partnerships. The colleges were selected for interviews based on whether their descriptive responses seemed to illustrate the broader trends and findings of the survey. They are not

meant to be a representative sample of the respondents, but rather to provide insight into common implementation challenges or to feature promising practices.

The 38 survey respondents represent 13 states. Twenty-two colleges represent urban areas (either large or midsize cities), nine are in rural areas, and one answered on behalf of a statewide system. Colleges were of varying sizes: seven have enrollment over 40,000; six have enrollment between 20, 000-39,999; six have enrollment of 10,000-19,999; four between 5,000-9,999; and eight under 4,999 students. Most respondent colleges (87.5 percent) are members of RACC, and 41 percent are members of the CCWC. Additionally, 19 percent of respondents are recipients of a Department of Labor American Apprenticeship Initiative Grant, and 31 percent reported participating in a state apprenticeship expansion grant initiative.

The individuals completing the survey hold a wide variety of titles, ranging from program coordinator to dean to provost/vice president. A review of respondents' titles suggest that they are evenly distributed between academic departments (dean, associate dean, etc.), workforce development (vice president, executive director), and apprenticeship program divisions (apprenticeship coordinator/manager).

Appendix B: Survey Result Highlights

Top five "toughest challenges" for apprenticeship delivery

Rank	Challenge	% Cited
1.	Securing employer funding for training program design and delivery	42
2.	Finding a funding source to support noncredit training, to maintain affordable tuition	33
3.	Gaining employer participation in training program design and delivery	25
4.	Accepting prior learning credit into a college-credit program, including from high-quality workforce training programs such as apprenticeships	23
5.	Recruiting students and meeting enrollment goals for technical academic departments	22

Note: For each of the 13 challenge statements, survey respondents could assess it as a tough challenge, moderate challenge, not a challenge, or not sure.

Qualitative descriptions of challenges for bringing together academic instruction with employer training

Type of Challenge	Number of Comments	Sample Response	
Employer buy-in/ engagement	6 comments	"Our biggest challenge is employer buy-in on the option [of] apprenticeship used as a means of training."	
Student recruitment and enrollment	3 comments	"Marketing and recruiting for apprenticeship opportunities	
Getting college buy-in	3 comments	"Gaining support from the academic side to implement new apprenticeships."	
Faculty-related challenges	3 comments	"Finding qualified and available adjunct instructors."	

Top five learning topics with respondents choosing "very interested"

Rank	Statement of Learning Interest	% "Very interested"
1.	Employer engagement strategies to attract new employer sponsors of apprentices	62
2.	Recruiting underrepresented students into apprenticeship programs	57
(tie)	Leveraging WIOA funding for apprenticeship programs	57
(tie)	State and federal policies and incentives for apprenticeship programs	57
5.	Recruiting new students into apprenticeship programs	54

Note: For each of the 10 potential learning interest statements, survey respondents were asked to rate it on a 5-point scale ranging from "very interested" to "not at all interested."

Acknowledgments

Judith Lorei and Deborah Kobes of Jobs for the Future contributed to the survey development and provided editing. The authors are grateful for the contributions of all survey respondents and especially those who agreed to be interviewed and share additional information about their apprenticeship programs and strategies. These include Julie Parks of Grand Rapids Community College, Rebecca Lake of Harper College, and Matthew Meyer with the North Carolina Community College System.

This project has been funded, either wholly or in part, with federal funds from the Department of Labor, Employment & Training Administration under contract Number DOL-ETA-16-C-0124. The contents of this publication do not necessarily reflect the views or policies of the Department of Labor, nor does the mention of trade names, commercial products, or organizations imply endorsement of same by the U.S. Government.

About Equity Partners in Apprenticeship

Under a contract awarded by the U.S. Department of Labor, JFF is serving as an equity partner in Registered Apprenticeship and working to connect women, people of color, and opportunity youth to RA programs. JFF has convened a national partnership that includes CVS Health, Hilton, The Hartford, National Association of Workforce Boards, Community College Workforce Consortium, Opportunity Youth Incentive Fund, Upwardly Global, and FASTPORT, as well as regional partners in Chicago, Houston, Los Angeles/Long Beach, and Philadelphia. These employers, community colleges, workforce boards, and communitybased organizations, with technical assistance from JFF, seek to advance equity in RA by creating stronger referral systems into RA programs, creating new pre-apprenticeships or aligning existing job training programs to RA, and enhancing services that increase the retention and success of apprentices.



) JOBS FOR THE FUTURE

JFF is a national nonprofit that builds educational and economic opportunity for underserved populations in the United States. JFF develops innovative programs and public policies that increase college readiness and career success, and build a more highly skilled, competitive workforce. With over 30 years of experience, JFF is a recognized national leader in bridging education and work to increase economic mobility and strengthen our economy.



TEL 617.728.4446 FAX 617.728.4857 info@jff.org 88 Broad Street, 8th Floor, Boston, MA 02110 (HQ) 122 C Street, NW, Suite 650, Washington, DC 20001 505 14th Street, Suite 340, Oakland, CA 94612

WWW.JFF.ORG









