



**Testimony by Deborah Kobes | Interim Director of the Center for
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U.S. House of Representatives Committee on Small Businesses | Subcommittee on Innovation,
Entrepreneurship, and Workforce Development

“Back to School, Back to Startups: Supporting Youth Apprenticeship, Entrepreneurship,
and Workforce Development”

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Good morning, Chairman Crow, Ranking Member Kim, and other members of the subcommittee. Thank you for inviting me to testify today about the value and potential of youth apprenticeship and other forms of work-based learning for America's youth and in development of the nation's talent pipeline. I am honored to participate.

My name is Deborah Kobes. I am a senior director at Jobs for the Future (JFF), and I lead our Center for Apprenticeship and Work-Based Learning. For almost 40 years, JFF has worked to transform America's workforce and education systems to achieve equitable economic advancement for all. We launched the Center for Apprenticeship and Work-Based Learning in 2017 to leverage our deep expertise in advancing these highly successful workforce development models. We build the capacity of employers, educators, and other stakeholders to implement apprenticeship and work-based learning programs in new industries, organizations, and communities.

These models can provide a grow-your-own talent solution that is particularly valuable to small businesses who have trouble attracting and retaining talent in a tight labor market.¹ While my testimony applies to small businesses, most of what I will discuss today does not apply exclusively to them. Rather, apprenticeship and work-based learning have the power to connect young people to high-demand, high-quality jobs across the economy. We must continue to improve these high value workforce offerings however to deliver on this promise, especially for populations who have been excluded from opportunities for economic advancement.

In my testimony today, I will share JFF's perspective on work-based learning as a powerful youth education and workforce development strategy. I'll discuss recent trends in youth apprenticeship, including challenges to diversifying the apprenticeship system, and review the important role small businesses can play in the design and delivery of youth apprenticeship. Finally, I will share JFF's recommendations of policies that can expand and improve youth apprenticeship, including strategies for increasing equity and small business engagement.

The lessons and recommendations I present today draw on a wide range of JFF experiences and those of our partners. A few of our most relevant initiatives are representative of the growing momentum for work-based learning and apprenticeship innovations at the local, state, and federal levels. For the past decade, JFF and the Harvard Graduate School of Education have partnered through the Pathways to Prosperity Network with K-12 and postsecondary education and nonprofit leaders, policymakers, and employers in 13 states and over 60 regions to build equitable college and career pathways systems that include work-based learning opportunities to expand economic opportunity for all young people and meet regional talent needs.

In the area of apprenticeship, JFF works closely with the Department of Labor's Office of Apprenticeship to expand and modernize Registered Apprenticeship. We have enrolled more than 1,400 16-to-24-year-olds into Registered Apprenticeship programs over the last five years. As a current Youth Apprenticeship Intermediary for the Department of Labor's Office of Apprenticeship, JFF has launched 20 new in-school youth apprenticeship programs and added a youth-focused element to 27 existing apprenticeships. We have also focused on serving out-of-school youth through a recent Office of Apprenticeship contract, resulting in 17 new or expanded out-of-school youth-focused programs. This summer, we were excited to launch work funded by an Apprenticeship Building America grant that will tie together these efforts to create cohesive pre-apprenticeship and apprenticeship pathways for both in-school and out-of-school youth in partnership with local leaders.

This youth-focused work complements JFF apprenticeship initiatives that focus on building diversity and equity into the Registered Apprenticeship system. As a manufacturing intermediary, we are expanding apprenticeship among primarily small and medium-size manufacturers. Of 1,550 manufacturing apprentices registered in just under two years, over one-quarter are youth and over 60 percent are from populations that are underrepresented in Registered Apprenticeship. As a Diversity, Equity, Inclusion, and Accessibility (DEIA) in Registered Apprenticeship Center of Excellence, we operate an Innovation Hub that is building the capacity of apprenticeship stakeholders to expand access and improve outcomes for apprentices from underrepresented populations. We are pursuing systemic solutions to reduce occupational segregation within apprenticeship, mobilize employers as drivers of DEIA, and connect Minority Serving Institutions and others who serve underrepresented populations to the apprenticeship system. Finally, we seek to support policymakers and other leaders in efforts to maintain the efficacy of the apprenticeship and work-based learning systems as they expand and modernize.

Work-Based Learning as a Youth Education and Workforce Development Strategy

Work-based learning, through which students or young adults complete meaningful tasks in a workplace setting, is a valuable education and training model for a range of learners, including K-12 and college students and young adults.² Work-based learning spans a continuum of models, from short-term career exposure activities such as job shadowing to internships and the most rigorous form of work-based learning, Registered Apprenticeships. High quality work-based learning programs offer compensation while providing employability skills, entry-level technical knowledge, career navigation assistance, and exposure to the world of work. They also build professional networks for young people—including among small businesses and entrepreneurs.³

Work-based learning deepens education and training pathways for youth, offering a pedagogy grounded in applied learning. Young people who are not drawn to the traditional classroom can be motivated by understanding how their academic instruction relates to real-world careers. Done right, work-based learning serves not only as preparation for careers but also for college or other postsecondary education.

Achieving these goals requires high-quality programs that are accessible to all young people, including youth marginalized from these opportunities. JFF has advanced best practices for integrating work-based learning into the educational experiences of young people at scale. This work begins by cultivating, establishing, and formalizing strong partnerships and collaboration among state and regional leaders in K-12 education, postsecondary education and training, employers, and economic and workforce development to co-design an integrated system that connects education to careers. Such a system includes clear programs of study spanning grades 9-14 (and beyond); and provides academic, technical, and work-based learning that leads to in-demand and stackable credentials in careers with career ladders as dictated by regional labor markets. The success of these programs of study is predicated on a clear sequence of experiences that are developmentally appropriate, increase in complexity and rigor, and provide strategic early college course-taking aligned with work-based experience.

The intentional design of these experiences ensures that youth see a clear path without “dead ends” in terms of academic attainment or career advancement. Engaging employers in this process is key. Employers need schools and training providers to build a talent pipeline; and schools and training providers need employers to ensure they are effectively preparing youth for in-demand careers. One critical strategy to achieving these goals is establishing working groups of educators and employers to develop and validate the skills and competencies young people need to enter and succeed in the workplace.

With 45 percent of surveyed Generation Z respondents being interested in eventually launching a business, work-based learning strategies can support a wide range of career pathway options by working in concert with youth entrepreneurial education and training.⁴ Work-based learning give students the technical industry skills for their core business services while entrepreneurship training can provide the skills start their own business. Small business are a particularly valuable setting for these programs, because they offer students the ability to witness entrepreneurship skills beyond other industry skills as well as provide access to mentors and professional networks needed to start their own business.

Trends in Youth Apprenticeship

Youth apprenticeship programs represent the most in-depth model of work-based learning. Currently, there are differing definitions of what constitutes a youth apprenticeship, with variations primarily based on whether they are limited to in-school students or also include out-of-school youth; and whether they extend to programs that are not Registered Apprenticeships. Different definitions for youth apprenticeship appear in H.R. 447, the National Apprenticeship Act passed by the House in 2021, federal grant opportunities issued by the U.S. Department of Labor, state regulations, and practitioner usage.

As we will discuss in our recommendations, JFF believes that there should be *a clear and consistent federal definition of youth apprenticeship*. We favor defining youth apprenticeship as a Registered Apprenticeship program specifically designed for and serving youth—whether in or out of school—between the ages of 16 and 24. We also support the position of the U.S. Department of Labor that youth apprenticeships may vary, depending upon the location and sponsoring business or organization, but all should include these essential components:

- 1) Industry leadership in establishing and vetting standards, as well as active involvement of business, including apprenticeship councils, industry associations, and other partnerships, in apprenticeship delivery
- 2) Structured on-the-job training of at least 2,000 hours or a competency-based equivalent that often works well for in-school youth, including supports and coaching from experienced mentors on-site
- 3) Classroom-based academic instruction related to the technical and academic competencies required for the job, with high-quality in-school youth programs integrating postsecondary credit
- 4) Rewards for student acquisition of apprenticeship skills, including wages as students begin work and pay increases as they meet identified performance benchmarks
- 5) A nationally recognized credential that is portable and certifies that the apprentice is fully qualified for a position in the industry awarded by the appropriate federal or state agency upon completion of the apprenticeship, with interim credentials possible along the way

The good news is that the number of young people participating in apprenticeship programs has increased over the past decade. JFF released an analysis, “The Current State of Diversity and Equity in U.S. Apprenticeships for Young People,” on Tuesday, September 13 that shows that the number of youth below the age of 25 registering as apprentices more than doubled between 2010 and 2020, significantly outpacing the growth of registered apprentices overall.⁵ This growth has been spurred in part by federal investments through the Department of Labor. State

apprenticeship leaders are also increasingly partnering with education agencies and leaders to fold youth apprenticeship into their Registered Apprenticeship expansion efforts. For example, Oregon and Delaware recently registered youth apprenticeships for the first time. The Partnership to Advance Youth Apprenticeship, led by New America and for which JFF is a national partner, is building local and state capacity to implement these emerging youth apprenticeships.

This growth has had a positive impact on young people: Our analysis shows that youth apprentices between 2010 and 2020 earned an average of \$31 an hour, exceeding the average wage for workers in this age group by approximately \$18 per hour. Apprenticeships in STEM occupations, while still accounting for a small share of youth apprentices overall, have grown five-fold, suggesting a strong opportunity to connect members of populations that have been underrepresented in the technology sector to well-paid jobs in STEM-related fields. Youth apprenticeship has made progress in becoming more accessible to more populations. Female representation doubled in the 10 years analyzed, with women accounting for over 10 percent of new apprentices in 2020. Similarly, the share of Latinx apprentices increased in the same period.

Equity Challenges

While significant progress has been made in the expansion of youth apprenticeship, there is more progress to be made. The benefits of youth apprenticeship do not accrue to all apprentices equally, with persistent disparities in participation and outcomes, as illustrated by these statistics:

- Nearly 90 percent of youth apprentices were male. Almost two-thirds of youth apprentices identified as white, and the share of Black apprentices actually slightly declined over the decade.
- Male youth apprentices still consistently earned nearly twice as much as women—\$30.57 per hour at the completion of their apprenticeship programs compared to \$17.62 for women. Similarly, Black apprentices' average exit wage of \$23 per hour fell short when compared to \$30 earned by white apprentices. These wage patterns are driven in part occupational segregation—the fact that white male apprentices are most likely to access and enroll in occupations that pay higher wages than the top occupations for members of many other demographic groups.
- While we have not yet analyzed completion rates for youth apprentices, completion rates in the Registered Apprenticeship system vary demographically, with particularly low completion rates among Black apprentices.⁶

These statistics show the need to continue to explicitly address diversity, equity, inclusion, and accessibility in youth apprenticeship program design. JFF is continuing to analyze the data to identify programs designed specifically for high school youth, and we are hopeful that youth-oriented programs will show progress in diversity and equity metrics. We look forward to continuing that conversation with the Department of Labor and members of Congress as we generate new findings in the months to come.

Engaging Small Businesses in Youth Apprenticeship

Employers are central to the design and delivery of youth apprenticeship—they hire the apprentices and supervise structured on-the-job learning. As the employers of almost half of all private-sector workers in the country, small businesses are critical to expanding the scale of youth apprenticeship.⁷ In exchange for investing in youth, small businesses can benefit from recruiting talent, ensuring that the education and training of their workers is aligned with company needs, and building a loyal workforce.

JFF has seen successful examples time and time again of small businesses offering apprenticeship, and we have seen how these successes can multiply as employer champions share their stories with the small business community. For example, 11 small and medium-size John Deere dealers in 14 states have registered for a John Deere Agricultural Equipment Technician program and interest continues to grow.

Yet, despite the return on investment provided by apprenticeship, employers face a range of tactical challenges in participating in youth apprenticeship. Many of these challenges are even more pronounced for small businesses, who lack the capacity to oversee workforce training efforts and lack the scale to gain the efficiency of training a cohort of apprentices. Several pervasive challenges that JFF has seen to the adoption of youth apprenticeship among small businesses are:

- **Perception of restrictive labor laws and liability for minors:** Employers are concerned about the liability issues and insurance costs of youth employment, especially in industries with hazardous occupations. These regulations vary across states and industries, but companies that are committed to delivering youth apprenticeship have been able to navigate these concerns.⁸ In general, a company's workers' compensation insurance policy applies to youth workers, and additional insurance can be purchased by the employer or a third party like a school. Moreover, most activities considered hazardous by the Federal Labor Standards Act would not be the focus of a youth apprenticeship. Finally, federal law, and many states, make explicit exceptions for work within a supervised apprenticeship program.⁹

- **Scheduling work experience:** Creating a schedule that accommodates high school and employer needs can be challenging. Most states have requirements for seat time, teacher of record, and attendance reporting that limit the flexibility of schools to facilitate time in the workplace.¹⁰ Small businesses must work with schools to creatively navigate these constraints, often scheduling experiences around academic calendars.

- **Navigating funding sources:** Youth apprenticeship offers a strong return on investment, but it is also expensive to deliver. While funding exists to support these programs, securing sufficient support often requires braiding together funds from multiple sources and with differing eligibility requirements, purposes, and allowable costs. Small businesses often lack the awareness and time to effectively tap into:
 - State tax credits and tuition waivers for registered apprenticeships, as well as state training funds that are often administered through community college systems. These funds are not available in all states.

 - Workforce Innovation and Opportunity Act (WIOA) funding, including a required 20 percent Youth Formula Program expenditure rate for work experiences. On-the-job training wage reimbursement varies by company size—with the greatest rate accrued to small businesses. Although apprenticeship is eligible for these funds, this is a difficult system to navigate. Local workforce development boards are not required to invest in apprenticeships, and while adoption is increasing, progress is relatively slow and uneven.

 - Apprenticeship-focused incentive funds administered through Department of Labor contractors and a range of grantees. While these funds are increasingly available to offset employer costs in delivering apprenticeship, each contractor or grantee has their own policies and latitude in deciding how to administer funds.

 - A host of federal workforce investments across a range of agencies. Pell Grants, the GI Bill, the Supplemental Nutritional Assistance Program, Department of Transportation programs, and other infrastructure funding stemming from recent legislation can all support small business engagement in apprenticeship programs, and this landscape continues to evolve.

Policy Recommendations

A range of policies can support the continued momentum and expansion of high-quality work-based learning and youth apprenticeships, ongoing progress toward equity in apprenticeship, and uptake of youth apprenticeship among small businesses. JFF offers policy recommendations to address the constraints and challenges currently faced by youth apprenticeship stakeholders, including employers.

Many of these federal policy recommendations reflect state-level policy recommendations of the Partnership to Advance Youth Apprenticeship, of which JFF is a national partner.¹¹

Expanding Youth Apprenticeship

Following are policy ideas to make it easier to launch and deliver high-quality youth apprenticeships:

- **Develop a clear and consistent federal definition of youth apprenticeship.** We favor defining youth apprenticeship as a Registered Apprenticeship program specifically designed for and serving youth—whether in or out of school—between the ages of 16 and 24. Because this would be a Registered Apprenticeship program, this would include five core elements outlined by the Department of Labor: business involvement, at least 2,000 hours of on-the-job learning (or a competency-based equivalent), 144 hours of related technical instruction, progressive wage gains, and the award of an nationally-recognized occupational credential.
- **Create policy alignment across education and workforce systems:** Facilitating youth apprenticeship at scale will require secondary institutions to have the flexibility they need to accommodate student work experience. This will require the following: improved alignment across K-12, postsecondary education, and workforce development systems; incentives for K-12 systems to update policies, such as seat time requirements, that limit engagement in youth apprenticeship and other work-based learning activities; and clarification that high quality work-based learning opportunities should be integral to core academic as well as career and technical education programs.
- **Support the expansion of youth entrepreneurship opportunities in conjunction with youth apprenticeship:** Congress can invest in youth entrepreneurship through several vehicles including the Economic Development Administration’s Build to Scale program, the 21st Century Entrepreneurship Act, and

National Entrepreneurship Corps. In addition, we recommend including youth in policy development through a Youth Advisement group in the Small Business Administration.

Increasing Equitable Access to and Outcomes From Youth Apprenticeship

Following are policy ideas to build on the gains in diversity in youth apprenticeship and promote equitable experiences and outcomes:

- **Invest in youth apprenticeship completion and wage equity.** Congress can support greater diversity, equity, inclusion, and accessibility in youth apprenticeship by refocusing investments from a primarily scaling-driven approach to one that emphasizes apprenticeship completion and reductions in demographic inequities in apprenticeship wage outcomes. We recommend including these metrics in all federal investments in apprenticeship, and piloting pay-for-success funding structures that focus on reducing gaps in completion and wage outcomes.
- **Provide flexible funding to integrate equitable program designs into youth apprenticeships.** DEIA in apprenticeship requires intentional design and investment at all stages of program delivery, from outreach and recruitment to the program experience to supportive services that enable continued participation.¹² We recommend that Congress provide flexible funding to support these practices, which are particularly important for youth success:
 - *Pre-apprenticeships:* These programs create accessible on-ramps for young people who aren't yet ready for apprenticeship. High-quality pre-apprenticeships provide participants with career navigation support and industry-specific entry-level skills, leading to a clear path into apprenticeships.
 - *Inclusive outreach and recruitment practices:* In-school youth programs need to identify outreach and selection processes that do not reinforce educational and career inequities and do ensure that apprenticeship isn't perceived as a pathway that is inferior to college. Programs serving out-of-school youth benefit from partnering with community-based organizations with the trust of populations that are underrepresented in apprenticeship.
 - *Accessible classroom instruction:* Equitable educational practices help apprentices understand how the skills they are developing in the classroom relate to their on-the-job work and provide opportunities for reflection. To expand accessibility, universal design for learning can benefit all individuals—including those with disabilities, instructional materials can be offered in multiple languages, and apprentices can be offered a range of ways to demonstrate knowledge gains.

- *Robust mentorship:* Mentorship supports apprentices of all ages, but it is especially important for young people who are more likely to have limited or no experience in the workforce. Young people can benefit from access to mentors whose backgrounds are similar to theirs and who can draw on personal experiences navigating the range of workplace dynamics facing workers from populations that are underrepresented in apprenticeship.
- *Supportive services:* Apprentices often need assistance to overcome financial barriers such as testing fees and the costs of uniforms, training materials, and equipment. Transportation can be particularly challenging for young people, including in-school youth who may have to travel to both school and work on the same day. Many young people may not have the technology or high-speed internet service necessary to access online instruction.
- *Apprenticeship navigators:* Having a single staff point of contact to support apprentices as they access services and troubleshoot challenges is valuable for young people who are shifting between educational institutions and the workplace and may not know the appropriate place to turn for a given problem.
- **Build small business capacity to deliver equitable apprenticeships.** We recommend that Congress authorize the creation of training, funding, and support to employer supervisors and training providers to increase their ability to create diverse, equitable, inclusive, and accessible workplaces for youth apprentices.
- **Support data collection on youth apprenticeship experiences.** The Registered Apprenticeship system collects individual-level data through the Department of Labor’s centralized RAPIDS database. With completion rates around 35 percent in Registered Apprenticeship,¹³ metrics that help explain why workers leave apprenticeships can provide crucial insight into how to design programs that support retention, maximize employer training investments, and identify the factors that drive variations in completion rates across demographic groups. Unfortunately, this metric often remains blank. We recommend that Congress incentivize the provision of this data and sponsor a campaign about the importance of providing this information.

Expanding Small Business Engagement

Following are policy ideas for encouraging small business to participate in youth apprenticeship.

- **Invest in intermediaries:** The time and effort required for high-quality talent development efforts creates a particularly high barrier for small businesses with limited bandwidth. Intermediaries, such as workforce boards, chambers of commerce, community colleges, and community-based organizations, can reduce this burden at all

stages of youth apprenticeship design and delivery. Intermediaries, especially local and industry organizations already trusted by small businesses, can convene employers to jointly deliver a youth apprenticeship program, lead program design efforts, identify and maintain relationships with education and support service partners, secure sustainable public and private funding, and oversee administration, including public reporting. We recommend that Congress invest flexible funds in intermediaries, with an eye toward systems change to complement training funds focused on individual-level outcomes.

- **Support sector strategies and employer consortia:** Small businesses benefit by working with one another and large employers. Sector strategies, already promoted in WIOA and a number of state investments, bring together employers in a specific industry to build career pathways and support regional talent pipelines. We recommend that Congress support sector strategies and give employer-driven partnerships incentives for making youth apprenticeship a featured option.
- **Create guidance to address perceived liability concerns:** Despite variations in labor law and insurance policies across states, the concerns that small businesses have about hiring young people can be addressed with better guidance on labor laws and insurance. We recommend that Congress support the creation of a centralized and accessible platform that provides transparency around differing state youth employment laws.
- **Streamline navigation of funding sources:** Youth apprenticeship sponsors draw on a mix of public resources to offset program costs. In some cases, such as programs funded under WIOA, Registered Apprenticeship is allowable, but workforce development boards are not yet electing to fund youth apprenticeship at scale. The Small Business Committee can support federal and state efforts to encourage greater investment in apprenticeship. We recommend that Congress clarify that Pell Grants and federal work study funds can be used for Registered Apprenticeship, while at the same time expanding Pell eligibility to include non-degree, short-term credential programs. Recipients of the emerging flow of Infrastructure Investment and Jobs, CHIPS, and Inflation Reduction Act resources will require assistance to learn about apprenticeship and connect to youth apprenticeship stakeholders. We recommend that the Committee support the creation of tools, resources, and other efforts to train small businesses to tap into the public funding available for youth apprenticeship.

Conclusion

Thank you once again for the opportunity to share this testimony. I deeply appreciate the Small Business Committee’s longstanding interest in apprenticeship, and I look forward to continuing to support your efforts to facilitate the adoption of youth apprenticeship strategies among small businesses.

Endnotes

¹ “Work-Based Learning With Small Business,” Fran Kennedy, Matthew Poland, Mary Wright, Jobs for the Future. <https://www.jff.org/resources/work-based-learning-small-business/>

² For example, “Work-based Learning Leads to Engaged Employees,” Association for Career and Technical Education. <https://ctepolicywatch.acteonline.org/2014/10/work-based-learning-leads-to-engaged-employees-.html>

³ “Work-Based Learning Can Advance Equity and Opportunity for America’s Young People,” Martha Ross, Richard Kazis, Nicole Bateman, and Laura Stateler, Brookings Institution: <https://www.brookings.edu/research/work-based-learning-can-advance-equity-and-opportunity-for-americas-young-people/>

⁴ EY. https://www.ey.com/en_us/news/2021/11/ey-releases-gen-z-survey-revealing-businesses-must-rethink-their-plan-z

⁵ “The Current State of Diversity and Equity in U.S. Apprenticeships for Young People,” Myriam Sullivan, Lois Joy, Dristi Adhikari, Vicki Ritterbrand, Jobs for the Future. <https://info.jff.org/apprenticeshipdeia-youth-apprenticeship-rapids>

⁶ Equity Snapshot: Apprenticeships in America. Janelle Jones, Alexander Hertel-Fernandez, Christopher DeCarlo. U.S. Department of Labor. <https://blog.dol.gov/2021/11/03/equity-snapshot-apprenticeships-in-america>

⁷ 2020 Small Business Profile, U.S. Small Business Administration, Office of Advocacy. <https://cdn.advocacy.sba.gov/wp-content/uploads/2020/06/04144224/2020-Small-Business-Economic-Profile-US.pdf>

⁸ “Not As Hard As You Think: Engaging High School Students in Work-Based Learning,” Charlotte Cahill and Sheila Jackson, Jobs for the Future. <https://www.jff.org/resources/not-hard-you-think-engaging-high-school-students-work-based-learning/>

⁹ Framework on Registered Apprenticeship for High School Students, Training and Employment Notice 31-16. https://wdr.doleta.gov/directives/attach/TEN/TEN_31-16.pdf

¹⁰ State Policy Playbook to Advance Youth Apprenticeship, National Governors Association. <https://www.nga.org/center/publications/state-policy-playbook-to-advance-youth-apprenticeship/>

¹¹ State Policy Playbook, National Governors Association. <https://www.nga.org/center/publications/state-policy-playbook-to-advance-youth-apprenticeship/>

¹² “Program Design Framework for Diversity, Equity, Inclusion, and Accessibility in Registered Apprenticeship,” Vanessa Bennett, Maria Cabiya, Myriam Sullivan, Deborah Kobes, Jobs for the Future. <https://info.jff.org/apprenticeshipdeia-framework>

¹³ Equity Snapshot: Apprenticeships in America. <https://blog.dol.gov/2021/11/03/equity-snapshot-apprenticeships-in-america>