GROWING EQUITY AND DIVERSITY THROUGH APPRENTICESHIP

Business Perspectives

AT A GLANCE

More than 20 leading employers and industry associations offer their strategies to improve apprenticeship access and success for underrepresented populations.

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Acknowledgments

About JFF's Center for Apprenticeship & Work-Based Learning

JFF is a national nonprofit that works to accelerate the alignment and transformation of the American workforce and education systems to ensure access to economic advancement for all. Apprenticeship and work-based learning are proven methods of connecting people to good careers while providing businesses with skilled workers. JFF's Center for Apprenticeship & Work-Based Learning consolidates JFF's broad skills and expertise on these approaches into a unique offering. We partner with employers, governments, educators, industry associations, and others to build and scale effective, high-quality programs.

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PREFACE

Since President Barack Obama's 2014 State of the Union call to "double and diversify" apprenticeships, the U.S. government has made historic bipartisan investments of almost $800 million in the nation's apprenticeship system and the country has added more than 200,000 new apprenticeships, the largest increase in decades. Interest in apprenticeship programs has continued in the Trump administration.

During this period, apprenticeships have undergone a major transformation in the United States. Once regarded primarily as a means of training for people pursuing blue collar, union jobs in the trades, the apprenticeship model is now more widely accepted as an innovative approach to training for all kinds of jobs. Apprenticeships are beginning to be offered in a variety of industries for many types of occupations, and work-based learning in general is more widely recognized as a talent development strategy that enables employers to develop a skilled workforce while providing people with the expertise they need to advance in their careers.

Despite the recent evolution of apprenticeship programs, there have been concerns that not all Americans have equal access to apprenticeship opportunities, and many workforce development specialists have recognized the need to find ways to get women, people of color, and people with disabilities more engaged in this proven pathway to middle class jobs and wages. In 2017, only 7.3 percent of the people who completed Registered Apprenticeships were women.[1] What's more, in 2017, men earned a median wage of $27.25 an hour when they completed apprenticeship programs, but the median wage for women was just $11.49 an hour at the end of their apprenticeships. Similarly, white workers who had completed apprenticeship programs earn a median wage of $26.14 an hour in 2017, while black people who completed apprenticeships earned a median wage of $14.35 an hour that year.

To understand how providers of apprenticeship programs can better support women, people of color, and others who have encountered barriers preventing them from accessing or completing work-based training programs, JFF interviewed more than two-dozen business representatives and industry leaders. The results are inspiring: Companies are invested in learning and applying what works.

These companies realize that a skilled, diverse workforce matters. Apprenticeship offers a way to provide real-time, on-the-job learning combined with the theory of classroom instruction, opening the doors to new candidates from a variety of backgrounds and skillsets.

These past few years have demonstrated apprenticeship's adaptability for a wide range of skill needs and industries. Today, apprenticeship is primed to become a core component of workforce strategies for now and the future, providing opportunities to even more Americans.

Sincerely,

Eric M. Seleznow

Eric Seleznow, Senior Advisor, JFF

EXECUTIVE SUMMARY

Apprenticeship programs are becoming increasingly common: The number of Registered Apprentices in the United States has increased by more than 200,000 since 2015. Businesses in a growing number of industries recognize that apprenticeship represents an effective alternative to traditional approaches of attracting, preparing, and upskilling talent. And for workers, apprenticeship has been shown to be a viable pathway to higher-skilled jobs, increased earnings, and longer-term job retention. With these benefits, apprenticeship programs are a promising approach to promote diversity and equity within companies and throughout industries. However, expanding apprenticeship into new sectors involves challenges, such as the need to overcome and change traditional perceptions of apprenticeship while also developing alternative ways to support the design and delivery of training programs, and promoting diversity and inclusion for nontraditional and underrepresented populations.

Just as the promise of improved equity and inclusion has not been realized in the broader workforce, apprenticeship programs specifically have challenges with diversity: an overwhelming majority of apprentices are white and male. Women, people of color, and individuals with disabilities have historically experienced challenges accessing and completing apprenticeship programs, particularly those in high-wage occupations and industries. Apprenticeship programs have much to offer businesses, workers, and the U.S. economy as a whole. They can contribute to the development of a stronger U.S. workforce, increase earnings, prepare people for the jobs of the future, and help companies meet their ever-changing workforce needs. However, the current gender and racial composition of most apprenticeship programs does not reflect the demographic makeup of the U.S. workforce.

This brief explores strategies that 22 leading companies and industry associations are using to make apprenticeship models more diverse and inclusive and, in turn, advance equity in their companies and the communities they serve. Some of these strategies have been identified as best practices by community-based organizations working with underrepresented populations and training providers but have not yet gained widespread employer buy-in. The examples shared here serve as lessons illustrating how more businesses can apply these strategies in their apprenticeship programs to improve diversity and equity within their internal operations and throughout their industries.

Equity in Apprenticeship

Designing and launching an apprenticeship program requires a lot of upfront planning, including determining how a combination of on-the-job training and related technical instruction can prepare workers for critical jobs. Businesses that are committed to better

supporting women, people of color, and workers from other nontraditional populations may also want to look for new ways to structure their apprenticeships to ensure that they help a diverse population of workers to succeed. That requires focusing not just on the training itself, but also on the recruitment and selection process, the practices that will be put in place to prepare people for their apprenticeships, and steps to take after apprenticeships are complete.

Embedding Equity in Specific Elements of Apprenticeship

Challenges	Equity Strategies
Apprenticeship: Recruitment and Selection	
Intentionally recruiting diverse populations and broadening selection criteria to engage new populations	
Company or industry has a reputation of not being welcoming to all workers	Create recruitment materials that show diversity
Applicant pool is not diverse	Partner with local organizations that have experience engaging with and supporting underrepresented populations
Apprenticeship is not seen as a viable pathway into modern-day jobs and careers	Help young people see the value of apprenticeship and understand the opportunities available in a wide range of industries
Job descriptions do not account for the apprenticeship pathway	Make explicit which job opportunities are available to people who complete an apprenticeship
Traditional selection criteria prevent strong candidates from applying	Take a competency-based approach when assessing and selecting candidates
Apprenticeship: Preparation	
Using pre-apprenticeship and bridge programs to increase access and improve the odds of success for candidates who need job-readiness supports	
Apprenticeship candidates lack basic understanding of the industry, terminology, and job expectations	Offer pre-apprenticeship programs that introduce people to the workplace culture and expectations
Younger apprenticeship candidates are not job-ready	Offer high school career and technical education programs that integrate academic subject matter and industry-specific lessons
Difficulty determining upfront if candidates are a good "fit" for the job	Require apprenticeship candidates to complete a sequence of learning activities as part of a prerequisite assessment
Pre-apprenticeship requirements present barriers to interested applicants	Be flexible in the design of pre-apprenticeship requirements and coordinate outside supports if possible
Apprenticeship: Training	
Designing flexible curriculum and embedding wraparound supports to ensure that apprentices excel and complete the program	
Difficulty designing a training experience to accommodate learners with a wide range of educational and job experiences while still developing critical competencies	Continually review, tweak, and modify the curriculum to address the needs of apprentices

Challenges	Equity Strategies
Lack of access to transportation or child care services, along with other financial and personal challenges, can interfere with apprenticeship success and completion	Locate partners that can provide additional resources and wraparound support systems
Mentors and supervisors are not fully prepared for the role of supporting apprentices in learning on the job	Carefully select mentors and supervisors and train them for their roles in apprenticeship delivery
Designing and continually improving apprenticeships requires a big commitment of time and resources, especially for smaller businesses	Work with intermediaries and support networks that can help smooth apprenticeship design and implementation
Apprenticeship: Continued Success of Journey-Level Workers Designing supports to help transition journey-level workers into more advanced full-time roles and creating career pathways to encourage retention	
Few supports exist to help journey-level workers transition into their roles	Design an onboarding program and/or a set of ongoing supports to help journey-level workers transition into skilled jobs
Limited workplace structures to help journey-level workers integrate with coworkers and feel comfortable working in teams	Design working structures that purposefully mix people who complete apprenticeships with workers who came to their roles via non-apprenticeship routes
Lack of specified career progressions to help journey-level workers continue to learn and advance on the job	Articulate the competencies, skills, certifications, and training pathways that can help workers find and reach the next rung on the career ladder
Lack of data on the career trajectories of apprenticeship graduates	Develop and track metrics to measure the growth, advancement, and retention of journey-level workers, in comparison to more general hires

Equity and Advancement Opportunities in the Workplace

In addition to building diversity and equity into their apprenticeship programs, some businesses are thinking more holistically and applying lessons from apprenticeship to companywide efforts to make all of their operations more equitable and inclusive.

For example, recruitment and selection strategies designed to improve the diversity of an apprenticeship program can be applied to a business's overall hiring and advancement practices. Likewise, partnerships with community-based organizations that were established to provide child care, transportation, or other services to apprentices can be expanded to benefit all employees.

Other possibilities include making greater use of career pathway programs to help workers who might otherwise be overlooked advance into skilled positions that are difficult to fill; expanding onboarding programs, assigning mentors and sponsors to employees at all levels to ensure that everyone on staff is aware of opportunities to grow and advance, or using data to monitor inclusivity—a practice that can shine a light on unconscious biases.

Embedding Equity in the Workplace

Challenges	Equity Strategies
The requirements listed in job descriptions do not articulate minimum competencies and often rely on proxies such as degrees	Clearly and comprehensively define critical competencies and job responsibilities, and incorporate apprenticeships into the hiring process
Lack of transparency about how employees can learn new skills and advance on the job	Establish clear career pathways
Job onboarding is not an organizational priority	Devise a strategic onboarding process for new hires that includes mentoring supports
Workplace culture is not conducive to fully integrating people from diverse backgrounds	Provide equity and diversity training, and probe for unconscious biases in company policies and practices
Difficulty driving positive change due to a lack of evidence of inclusivity	Collect and monitor data on workforce diversity
Top executives do not communicate the organization's commitment to diversity and inclusion	Make it clear that diversity and inclusion are business priorities by ensuring that leaders make everyone aware of the connection between equity and the bottom line

INTRODUCTION

In today's tightening labor market, many U.S. employers are turning to apprenticeships to fill positions that require people with hard-to-find skills. Businesses in a wide mix of industries, from health care and information technology (IT) to manufacturing, insurance, and hospitality, are reexamining apprenticeship. For many, this means setting up apprenticeship programs not only as a way to build a talent pipeline, but also as a way to improve the diversity of their workforces.

The focus on designing and implementing apprenticeship programs to emphasize inclusivity is important because women and people of color generally have less access to, and realize fewer benefits from, apprenticeships than white men do. According to the U.S. Department of Labor, women represent almost half of the labor force but made up just 8 percent of registered apprentices in 2018.[2] Meanwhile, although African Americans account for 13.4 percent of the U.S. population, just 10 percent of the people who completed Registered Apprenticeship programs were African American.

Limited participation is compounded by the outcomes among those who do engage.

What is Apprenticeship?

Apprenticeship is a workforce training model that combines paid on-the-job learning and formal classroom instruction to help a worker master the knowledge and skills needed for career success. High-quality apprenticeships typically include supervision and mentoring, align with industry standards, and result in a nationally recognized credential.

A Registered Apprenticeship is approved by either the U.S. Department of Labor's Office of Apprenticeship or a state apprenticeship agency. These programs last one to six years and are sponsored by employers, labor management organizations, or other intermediaries. In addition to the program elements common across all quality apprenticeships, these programs meet several requirements, including providing approximately 2,000 hours of on-the-job learning, 144 hours of related instruction, and progressively increasing wages.

In Fiscal Year 2017, the median hourly wage of men who completed apprenticeships was $27.25. For women, who often apprentice in lower-wage and lower-skilled industries and occupations, it was $11.49. African Americans had the lowest median wage of people from all racial and ethnic groups who completed apprenticeships that year: $14.35 per hour. Other races and ethnicities more closely track overall participation rates and wage rates.[3]

Despite outcomes like those, the apprenticeship model holds great promise as a way to connect people from underrepresented populations to jobs and careers that require highly sought-after

Diversity, Equity, and Inclusion Defined

Diversity focuses on differentiating the populations that are represented in apprenticeship and the relevant industry, for example increasing the number of people of color in apprenticeship programs that are predominately white or increasing the number of women in apprenticeships and industries that are largely male.

Equity focuses on eliminating the practices and/or processes that prevent the same high outcomes, like retention and advancement, in the apprenticeship or relevant industry. This includes examining biases or cultural assumptions that disadvantage people of color, women, and others the in selection, evaluation, and advancement process.

Inclusion is creating an environment that ensures that all individuals feel respected, involved, connected, and valued in their company, and where the employer demonstrates that it values all ideas, backgrounds, and perspectives.

skills. Companies struggling to find and retain talent are more willing to nurture talent within their own workforces, thereby expanding their hiring pools.

The apprenticeship model is particularly beneficial to people who are new to the workforce because it makes it more feasible for them to pursue training opportunities by enabling them to earn money while they learn, instead of having to choose between work and school. Some apprentices are able to earn credentials or degrees without incurring student debt, a big plus given the rising cost of college.[4]

To highlight promising strategies that organizations are using to promote and support diversity and equity in apprenticeship programs, JFF's Center for Apprenticeship & Work-Based Learning recently conducted dozens of interviews with business leaders and convened a March 2019 meeting where representatives of 22 employers and industry associations from various sectors engaged in a roundtable discussion about ways to build equity in apprenticeships. CEOs, diversity officers, human resources (HR) officers, and other business leaders responsible for overseeing apprenticeships provided insights into what it takes to lead an effort to use apprenticeship as a strategy to recruit, advance, and retain diverse talent.

"Talent is everything. Through paid youth apprenticeship, we're providing young people the opportunity to develop critical skills in occupations that they choose. This gives business the talent they need to compete globally."
Noel Ginsburg, Founder and CEO, CareerWise Colorado

This brief synthesizes the strategies shared by representatives of leading businesses that are designing and implementing apprenticeship programs to meet their skill needs while giving people from underserved populations pathways into solid middle-skill jobs. At each phase of program design and delivery, they are endeavoring to use the apprenticeship model as a way to train and advance talent not only to improve their competitiveness by addressing skills shortages but also to build workforces whose demographic makeup reflects that of their customer bases and the communities they serve.

Some of these strategies have yet to be widely adopted among businesses even though they have been identified as best practices by training providers and community-based organizations that work with underrepresented populations.

Some companies are just getting started. Others are more experienced and have tinkered with their apprenticeship designs to improve success rates.

This brief does not assess the effectiveness of particular strategies but rather provides a sense of how businesses are approaching apprenticeship design and what they are learning. It concludes with ideas of how to take lessons learned in developing apprenticeship programs and apply them on a larger scale to improve equity companywide. Examples include modifying job requirements so that they emphasize skills and abilities rather than degrees and other credentials, more clearly delineating internal career pathways, using mentors and sponsors to support employees, and measuring inclusivity.

> **"Building a highly skilled and diverse workforce is important not only for the U.S economy but also for the future of our industry. We're investing in apprenticeships because they will help us harness untapped potential and create the future leaders for our sector."**
> *Greg Case, President and Chief Executive Officer, Aon*

MAKING APPRENTICESHIPS MORE EQUITABLE

Apprenticeship can serve as a pipeline to attract new talent. But companies recognize that it is not enough to simply create an opportunity to pursue an apprenticeship, because the playing field isn't level and not everyone has the same degree of access. Businesses can improve their talent-development efforts by actively taking steps to make apprenticeship pathways more accessible across every phase of program delivery. This includes embedding equity into all elements of apprenticeship design, including recruitment and selection, preparation, training, and post-apprenticeship efforts to ensure that journey-level workers who have completed the program enjoy continued success.

The ultimate goal of equitable apprenticeships is to find and train talented workers who perform their jobs at high levels, are engaged and contributing employees, and continue to learn and be promoted. Each of the sections that follow discusses ways in which leading businesses view a specific stage of apprenticeship programs, with an emphasis on the challenges they face and sample strategies for success.

Adjust Recruitment and Selection Processes

Businesses seeking a diverse group of talented applicants for apprenticeship programs recruit widely. They actively engage with new populations to promote apprenticeship as a pathway to high-skill, well-paying jobs and careers, and to help people of all backgrounds see that they can be strong candidates for apprenticeship. To maximize the diversity of their apprentice cohorts, businesses and industry associations are using inclusive messaging and forging partnerships to widen their outreach as they communicate the value of apprenticeships. They are also using innovative approaches to assessing and selecting candidates.

Attracting a diverse applicant pool. Businesses in a number of high-wage industry sectors, such as IT and the building and construction trades, recognize that they have a reputation for predominantly hiring white males, and many of them are anxious to rebut that perception and show prospective employees that their workplaces are accessible and welcoming.

But reaching people from other demographic groups is a challenge. People with disabilities may see their work options as limited. Young people may not know about job opportunities and upward pathways in particular industries. Women may face barriers or otherwise be reluctant to enter male-dominated fields like construction or IT. People of color who do not see others who look like themselves entering and succeeding in a particular industry may be disinclined to apply. People who have low-paying jobs may not feel like they have the flexibility or financial

wherewithal to take the time to learn new skills and make a career shift. Veterans may not know how to translate their military experience into the civilian job market.

In the face of such challenges, businesses are rethinking the design of the marketing materials they use in efforts to recruit women, people of color, and members of other underrepresented populations. "It's extremely important to show diverse faces in marketing materials," says Lonnie Coleman, CEO of Cleveland-based mechanical contracting company **Coleman Spohn**, and a former apprentice himself. "How we present ourselves sends an important message to apprenticeship candidates and we want to say: 'You can do this. This is about you.'"

Even with improved outreach materials, many companies are finding that traditional recruitment methods that rely on passively posting job openings online is not enough to attract applicants from new populations. Organizations that run apprenticeship programs need to do more to attract candidates who may not otherwise be aware of the openings or may not see themselves as strong candidates for apprenticeships in certain lines of work. To widen their recruiting nets, many companies are partnering with local and national organizations that have experience engaging with and supporting underrepresented populations. Partners can include community-based organizations, local workforce boards, high schools, youth organizations, national nonprofits, unions, rehabilitation centers, city and county governments, veterans' organizations, the military, and community colleges and universities.

> **"This is not charity. This is a bottom-line decision. We need to attract new candidates to our industry and break down barriers that keep underrepresented populations out. I predict that apprenticeship will become the primary talent path into companies. But a first step is making company leaders see this as the way to win the talent war."**
> *Ryan Carson, CEO and Founder, Treehouse*

Businesspeople stress the importance of such collaborations. "It's much more than just feeding us applicants," says Jillian Walsh, employee experience and culture consultant at **Zurich Insurance (North America)**. Through collaborations, she explains, "we can work together to think about how to structure new pipelines that lead to great jobs and help us meet our business goals."

Aon, the professional services firm, regularly makes recruiting presentations to two-year students at Harold Washington College and Harper College, which are both in the Chicago area, and emphasizes that it offers a range of jobs, including positions as IT and HR specialists, in addition to insurance analyst roles.

Businesses caution that while partnerships can be powerful, they take some work. Much of their success depends on developing strong relationships and managing expectations. Apprenticeship programs generally last more than one year, so businesses need to have some insight into their partners' operations, including an understanding of how they are funded, the timelines they follow, and the performance outcomes they expect. Companies with experience in coordinating apprenticeship partnerships stress how important it is for businesses to understand the partner landscape and take responsibility for articulating needs and aligning desired outcomes. As one of the participants in our roundtable discussion said, "When it doesn't work, we should look at ourselves."

Updating perceptions of apprenticeships. Apprenticeships are often misunderstood. They are typically associated only with the traditional trades, and aren't seen as viable pathways into modern-day jobs and careers. Some companies that have heard the question "Isn't apprenticeship a union thing?" are trying to change the narrative. Businesses across a wide range of industries are working to build awareness that the apprenticeship model is in fact a modern approach to training that works for many industries and career paths.

But even businesses that are expanding apprenticeship programs haven't always done a good job of letting jobseekers know that they value the apprenticeship experiences they may have had; in fact, many companies typically don't list apprenticeships among the qualifications they're seeking in potential applicants.

That is starting to change. Some companies now recognize that completing an apprenticeship is evidence of proven competency and are specifying a preference for hiring people who have participated in apprenticeship programs. With its apprenticeship program, **The Hartford**, is recruiting skilled claims professionals outside of the traditional college track. Apprentices, who must have a two-year degree, are guaranteed a full-time job at the national insurer upon completion of the program's college courses and on-the-job training. In North America, **Zurich Insurance** is also beginning to accept apprenticeship as another credential in order to qualify for certain jobs.

It is also important to emphasize the value of apprenticeships when doing outreach to high schools and colleges. Companies and industry associations interested in the next generation of talent are educating high school and college students (as well as parents and guidance

counselors) about the various pathways into careers that do not require four-year college degrees. In an effort to attract recent graduates, some businesses also now align apprenticeship start dates with school calendars.

Such approaches can pay off for companies that are focusing on diversity and inclusion. "With youth apprenticeship you get more diverse people out of high school and learn quickly that all youth can succeed," said Noel Ginsburg, CEO of **CareerWise Colorado**, a statewide youth apprenticeship initiative that acts as an intermediary between businesses and K-12 school systems. "The earlier we start, the more inclusive we can be."

Competency-based assessment and selection of apprentices. Traditional selection criteria, such as formal degrees and years of previous experience, can exclude otherwise strong candidates with nontraditional backgrounds from consideration for participation in apprenticeship programs. Companies that recognize that competencies and skills are what matter are looking beyond traditional résumés for new ways to assess whether people have the traits and expertise they are looking for.

Techtonic and **Catalyte** use an apprenticeship selection strategy that focuses on aptitude rather than degree attainment or work experience. For its part, Catalyte uses artificial intelligence to reduce bias in assessing who has the ability to be a software developer, regardless of their previous education or work experience. Meanwhile, **IBM** sources its apprenticeship candidates from a diverse candidate pool, including veterans, P-TECH graduates, and people who are reentering the workforce. The company also has required bias training for candidates.

Prepare Candidates for Entry into Apprenticeship

When recruiting new talent, some companies find that pre-apprenticeship and other bridge programs that provide basic foundational training and an introduction to their industries can help more potential candidates be ready for apprenticeship entry. Pre-apprenticeship experiences can not only make apprenticeship more accessible, they can also increase the likelihood that apprentices will successfully complete the training program and become full-time employees. This is particularly true for some populations. For example, in the construction industry, there is evidence that pre-apprenticeships can help low-income, minority, and female workers locate, navigate, and retain employment.[5] For young people with no job experience, job-readiness programs can help them build supportive networks and prepare them to navigate career options.[6]

Providing job readiness and a basic understanding of the industry, terminology, and job expectations. Companies that recruit people from nontraditional populations are

likely to find potential apprentices who have the aptitude and the desire to succeed but don't yet have the knowledge, skills, or background to qualify for the apprenticeship. These candidates are also less likely to know how to navigate the application process for an apprenticeship or the industry itself. Such situations can be challenging because transitioning people into unfamiliar environments can be difficult for both the apprentices and their peer workers.

Pre-apprenticeship programs can help prepare would-be apprentices for such situations because they are designed to introduce people to the company and its expectations for employees, and give them an understanding of workplace culture, job roles, and industry norms. An additional benefit is that participants form relationships with their pre-apprenticeship peers, giving them a support network to call on from day one. That can be particularly helpful for apprentices from underrepresented communities who will be stepping into industries whose workforces generally haven't included people who look like them—when, say, a company recruits women apprentices to work in a male-dominated industry, or people with disabilities get jobs at companies where most of the workers are able-bodied.

Hershey, the Pennsylvania-based chocolate company, partners with Wilson Workforce and Rehabilitation Center and the Shenandoah Valley Workforce Development Board to recruit people with disabilities and other graduates of a 16-week pre-apprenticeship program designed to help participants master core manufacturing, warehouse, and employability skills. Hershey provides input on the curriculum but mostly trusts Wilson to provide a solid foundation of knowledge that Hershey can build on. Once people complete the pre-apprenticeship program, Hershey considers them for its Industrial Manufacturing Technician apprenticeship.

Apprenticeship sponsors can also design and manage their own pre-apprenticeship programs. For example, **North America's Building Trades Unions** (NABTU) offers a 120-hour (minimum) apprenticeship-readiness training program (ARP) that teaches the Building Trades' Multi-Craft Core Curriculum (MC3). The MC3 is recognized by affiliated local and national unions. Participants in NABTU ARPs receive an introduction to the construction industry as well as academic and hands-on training in which they learn skills such as blueprint reading, tool safety, construction, math, and the life skills necessary for success in the construction industry. Likewise, the **Ironworkers** union offers three-week, veterans- and women-only ARPs. Designed as a safe and encouraging introduction to the industry, the women-only program is taught by women and allows women to gain confidence before they enter job sites where they might be the only female apprentice. In Philadelphia, **SPIN Inc.**, a provider of services for people with intellectual, developmental, and autism spectrum disabilities, recruits unskilled youth for its apprenticeship program and finds pre-apprenticeship to be absolutely essential. "It gives our unskilled youth participants needed soft skills at a professional level," says Lucy Corker, director, professional development at SPIN.

Other companies similarly note that young people with little or no job experience may not have had the opportunity to apply their academic knowledge in an industry setting and may not have the professional skills needed to navigate the workplace. One strategy to prepare them for the type of environment they will encounter on the job is to offer high school career and technical education programs that integrate academic and industry-specific learning. For example, the **National Restaurant Association Educational Foundation** (NRAEF) offers a two-year program called ProStart that introduces students to the fundamentals of the restaurant industry, from daily restaurant operations and menu management to food safety. "ProStart serves as a kind of pre-apprenticeship program in that students gain key competencies and those who log 400 hours of on-the-job training earn advanced standing in a hospitality apprenticeship, giving them a real leg up on a career," says John Shortt, the NRAEF's director of program development.

Identifying candidates who are a good fit for an apprenticeship. Apprenticeships are a major investment for employers and apprentices alike. Companies do not always know for sure that incoming apprentices are truly committed to the job and the field. To address that challenge, several companies have designed their own prerequisite learning activities, often coursework completed online, as a way of testing not only a candidate's aptitude for the job but also his or her interest in and commitment to the industry. Candidates who complete the pre-work are better prepared on day one and more likely to complete their apprenticeship.

For example, **Treehouse**, an organization whose mission is to provide affordable technology education, accepts people as apprentices only after they complete a roughly six-month, self-paced sequence of online courses. To help make this requirement less onerous, Treehouse teamed up with Comcast, which provides candidates with laptops and internet connections. The company also designed the coursework to be flexible, so students will be able to continue working at their current jobs, and it provides mentors who offer candidates guidance via the internet.

Minimizing barriers for applicants. Many businesses find that pre-apprenticeship programs give them a larger pool of candidates who are prepared to jump into apprenticeships. But upfront requirements can also present barriers that cause potential applicants to pass up the opportunity. For example, pre-apprenticeship is unnecessary for candidates who already have the right skills and experience; also, all candidates are expected to invest time and work without pay.

Employers that want to minimize such hurdles seek to strike a balance between having sufficiently robust pre-training programs and screening processes, and keeping upfront activities as short and simple as possible. The goal is to fill jobs and develop productive workers

in a relatively short period of time, and one way to do that is to streamline pre-apprenticeships and incorporate as much training as possible into the apprenticeship itself.

To ensure that pre-apprenticeship programs are accessible, it's important for companies to be flexible about preliminary requirements and offer supports for candidates who find the qualifying activities burdensome. For example, **Treehouse** provides a flexible structure that allows candidates to complete pre-apprenticeship coursework on weekends or at night.

Plan Flexible and Responsive Training

High-quality apprenticeships are often intense long-term programs. Not all participants complete their apprenticeship: In the construction industry, for example, approximately half of the people who enroll in Registered Apprenticeship programs end up dropping out, and the dropout rates are higher for women and people of color.[7]

High dropout rates are costly for workers, who lose out on opportunities for career advancement if they don't finish their training, and for businesses, which invest in apprenticeships because they need people to move into hard-to-fill positions. Employers that want to reduce attrition may need to make adjustments to their programs. One step businesses can take to help ensure that their apprenticeship programs are designed and implemented in a way that gives participants a good chance at success is to give one person responsibility for the organization's apprenticeship and workforce development programs.

Ensuring that program design meets apprentices' needs. Nontraditional candidates come with a range of skills and skill gaps. It can be difficult to design a single training program that accommodates people with a wide range of educational and job experiences. To ensure that everyone is developing critical skills, employers must continually review the design of their apprenticeship programs. That may require modifying the curriculum, changing the schedule, or redefining the program capstone experiences.

Lippert Components, a vehicle parts manufacturer in Indiana, made its apprenticeship program more accessible to the approximately one-third of its workers who are Latinx by offering a bilingual version of the related instruction. The company also offers free online classes for English language learners. In North America, **Zurich Insurance** expanded its orientation and onboarding program to address workplace culture expectations such as dress code, attendance, and communication with supervisors. The company also improved the program design by building in study time that apprentices can use to work on their college coursework.

Techtonic now requires teams of apprentices to develop a new software program as a capstone project. As part of that effort, the teams must make presentations to the full company, a task that gives them a chance to showcase their skills and helps integrate them into the workforce. Techtonic CEO Heather Terenzio cautions that companies should be careful not to dilute the rigor of the learning experience when making curriculum adjustments. "We have purposefully structured our apprenticeship program to be rigorous, with a lot of gates along the way," she says. "We think this rightly generates a lot of pride in our completers and shows that they have the competency to be working alongside someone with a formal degree. We want to retain that cachet."

Providing wraparound support systems to apprentices. Businesspeople say that outreach efforts to new populations must go beyond finding "hidden superstars"; they must also include supports to help all new recruits, even those requiring greater initial resources, succeed.

Companies should expect that some apprentices will be facing a number of personal challenges. They may not have access to stable housing, child care, or transportation; or they might not own proper business attire, may lack financial literacy, and may struggle to support themselves. "We asked ourselves: What would it take to bring people who were unemployed or underemployed into a career pathway? We knew they would have challenges and we would need to build a training model that was intensive and accelerated but that also had real safety nets. But it's working and we are more committed than ever to this strategy," says Missy Hopson Sparks, vice president of talent management and workforce development at **Ochsner Health System** in Louisiana.

> **"Poverty is our biggest barrier. As a business, it is hard to think about how to pay for needed wraparound services. But it's an important acknowledgement when we are trying to pull up folks who need real supports."**
> *Sarah Currier, Vice President, Workforce Strategy, Dartmouth-Hitchcock*

Companies can call on local partners to provide needed wraparound services. Organizations with multiple locations gain efficiency by partnering with national nonprofits rather than establishing local partnerships in each of their locations. Employers may find that these investments pay off with improvements in apprenticeship completion rates and increases in the number of people who have the skills necessary to step into hard-to-fill positions.

Aon relies on One Million Degrees, a community-based organization in Chicago, to provide apprenticeship mentors and a program coordinator who can solve problems and act as an interface with a community college to help apprentices manage related instruction assignments.

In Philadelphia, **SPIN** works with the District 1199C Training & Upgrading Fund to provide services to its apprentices. But even with a strong local partner, providing services to apprentices "was harder than we expected. Our staff had to do a lot of hand-holding. We had to be flexible, loosen our onboarding rules, provide a lot of supports," said SPIN's Lucy Corker. "We had no idea how involved we would get in the apprentices' personal lives—driving them when necessary, helping them secure stable housing arrangements. We wanted to see them be successful but often struggled to provide a reasonable level of support and guidance." Businesses may find it challenging to strike the right balance between offering supports and recognizing when a person is not yet ready for an apprenticeship.

Ensuring that supervisors and mentors are prepared. Apprenticeship programs should have supervisors to oversee and direct on-the-job learning. Every apprentice also needs a mentor who can advocate on their behalf and be there when they need someone to check in with. Companies benefit when mentors are carefully selected and trained to build trusting relationships with apprentices and to give them helpful, positive feedback.

The **American Hotel & Lodging Association** works with hospitality companies to help them select, train, and support mentors to ensure that they can be effective as role models, motivators, and guides. **Zurich Insurance (North America)** uses mentorship as a development opportunity for its employees and has recently added a peer advising program featuring apprentice graduates. Some managers and mentors attend a four-week training program at Harper College in connection with Zurich North America's apprenticeship program. At **Mercy Health + Saint Joseph Mercy Health System** in Michigan, nurse educators meet monthly with apprentices, giving them advice and helping them navigate challenges.

Mentorship is hard work and a serious additional responsibility for the employees who take on the role. That said, businesses find that apprenticeship programs benefit their entire organizations, not just the apprentices themselves and the managers they work for. Apprenticeships yield intangible benefits that result in an enhanced workplace culture. Employees throughout the organization are aware of the programs and the mentorship opportunities, and they appreciate that the company cares about developing and retaining talent. Several companies are taking this support structure even further and fostering the expectation that all employees should be engaged in learning and prepared for the next level of upskilling. Building a more cooperative and nurturing workplace culture helps employees at all levels feel comfortable in learning on the job.

Supporting smaller businesses in apprenticeship design and implementation.
Designing, and continually improving, an apprenticeship program requires a big commitment of time and resources, especially when the initiative includes diversity, equity, and inclusion strategies that may require the organization to get involved in unfamiliar activities. Small and midsized enterprises may not be able to run such programs on their own. Those that can't may want to turn to intermediaries—such as industry associations, unions, and employer networks— that can coordinate stakeholders, ensure equitable delivery, and provide support services.

In the restaurant industry, businesses that need help running apprenticeship programs can turn to the **NRAEF** for help with activities like complying with the U.S. Department of Labor's reporting requirements, saving them significant time and effort. In the health care sector, employers can work with the **Healthcare Career Advancement Program** (H-CAP), a labor-management organization that provides technical assistance to businesses interested in setting up Registered Apprenticeship programs to prepare people for hard-to-fill health care jobs such as medical assistant, medical coder, and community health worker.

Design Supports for Post-Apprenticeship Success

When apprentices complete their programs and become skilled, journey-level workers, they generally lose the mentorship and other added supports that were part of the apprenticeship. They may face challenges as they transition into their highly skilled jobs, so some businesses are focusing on ways to help them feel welcome, empowered, and on track for continued advancement as they move into new phases of their careers. Those businesses are rethinking the kinds of onboarding, training, mentoring, and supports they provide to encourage former apprentices to grow, advance, and stay with the organization.

> **"In so many IT companies, there are no mentoring or guidance structures to help newcomers feel supported and be successful. Until we create a more inclusive culture, we are going to continue to burn out skilled workers who don't feel as though they can make it."**
> *Nancy Chan, Director of Product Partnerships and Social Impact, Catalyte*

Transitioning from apprentice to journey-level worker. Companies generally provide a long period of training and an array of supports during apprenticeships, but they tend to offer fewer supports to their other employees. Therefore, while journey-level workers who have

successfully completed apprenticeships are considered highly qualified employees, they may find the transition from training to only working difficult. Companies that recognize this challenge are redesigning their onboarding programs and/or offering new sets of ongoing supports to help ease the transition for former apprentices.

> **"Everyone hired at CVS Health through an apprenticeship has the CVS Health apprenticeship sponsor's contact number for the state, providing direct access to help support their career advancement. We want to send the message that 'we want you to succeed.' Apprenticeship completers should see themselves as elite."**
> *Yani Hurst, Workforce Initiatives Advisor, CVS Health*

For example, people who complete the three-month **Treehouse** apprenticeship become full-time employees of Treehouse client companies. Treehouse places a cohort of apprentices at a single company to create a built-in peer support structure. The company also works directly with each of the companies that hire its apprentices to design tightly structured first projects, following onboarding guidelines in its "Apprenticeship Playbook" to help recent graduates of its program succeed.

Catalyte takes a similar approach. "In many ways, we view apprentices as our customers and want to work with companies that will give them meaningful projects to work on and play a supportive role in their success," says Nancy Chan, director of product partnerships and social impact at Catalyte.

Mentorship opportunities are offered to journey-level workers at **IBM**, where more experienced colleagues will share career advice and help navigate the new role. Apprentices can build their IBM network using digital tools and online forums to connect with peers and mentors via online collaborations and learning conversations.

Several companies set up collaborative workplace structures to help journey-level workers integrate with their new coworkers and start to feel comfortable working in teams. Mixing apprenticeship graduates with employees who came through non-apprenticeship routes can help former apprentices build new support networks that go beyond the members of their apprenticeship cohorts. For example, **Hershey** is aware of the need to create a workplace culture that is inclusive to people with disabilities who come on board via apprenticeship. All

employees receive general awareness and sensitivity training, and each time a former apprentice is added to a production line, that person's team members receive specific training to help them get to know the new team member. **Techtonic**, which has a policy of emphasizing proven competency over résumé benchmarks like college degrees in its recruiting and hiring practices, regularly teams apprenticeship graduates with employees who have formal computer science degrees, signaling that the organization sees them as having equivalent levels of expertise.

Helping employees continue to learn and advance in their careers. After workers complete apprenticeships, they may not always know what it takes to move up and how they can go about gaining the necessary skills and competencies. Companies can encourage career advancement by clearly articulating the competencies, skills, certifications, and training pathways that can help workers find and reach the next rung on the career ladder. Even when businesses do outline career pathways, it is important to consider the structure and timing of the training required to ensure that workers can realistically pursue professional development opportunities while doing their current jobs. In health care, in particular, that can be challenging because medical roles are governed by a set of strict certifications and licensure rules that can be complicated to navigate.

> **"They can come in as an apprentice but leave as a leader."**
> *Julio Cruz Reyes, Personal Development Coach, Lippert Components, Inc.*

Some companies encourage apprenticeship graduates to keep building their skills and competencies by giving them preference for job openings and other career advancement opportunities, pay raises, or training opportunities. Moreover, if companies continue to make apprenticeship a preferred pathway to higher-skilled jobs, it's more likely that entry-level workers from diverse backgrounds will focus on developing their skills and climbing the career ladder.

Ochsner Health System is taking a comprehensive approach to workforce development that starts with recruiting young people and nontraditional jobseekers for positions in health care. Building on the success of an in-house accelerated training program called MA Now, the company is intentionally giving incumbent workers pathways to next level jobs. It created a 12-month upskilling apprenticeship through which medical assistants can earn associate's degrees in practical nursing and transition to hard-to-fill licensed practical nurse (LPN) jobs within the company.

Using data to support and track the career trajectories of apprentices. Companies use data to drive performance in priority areas. If they use it well they can create incentives to encourage people to try new approaches; if they don't use it well, they may accidentally create disincentives for new approaches.

Mercy Health + Saint Joseph Mercy Health System found that managers were hesitant to employ apprentices because they were concerned that their productivity metrics would decline if they had apprentices on their teams. By changing how apprentices were included in the worker pool, the company resolved that issue and managers began to welcome apprentices.

Data continues to be important even after people complete apprenticeships. Not all companies have a way of monitoring the performance of past apprentices to know if they are succeeding on the job and growing and advancing—or even whether they were staying with the organization. Those that do collect data about apprentices may not do so in a way that allows them to compare former apprentices to more general hires. Companies and unions that create data-tracking systems can monitor if and when journey-level workers take advantage of upskilling opportunities and advance, and they can learn where additional supports or guidance could foster continued success and raise the likelihood that former apprentices will remain in the industry. That kind of data can also show whether a company is making progress toward equitable outcomes.

For example, **Catalyte** measures the quality of software development projects to demonstrate to its clients that its teams are highly productive. The metrics provide evidence to skeptical clients that nontraditional workers, who may have come into the industry after working in fast food restaurants and convenience stores, produce high-quality work. This strengthens the former apprentices' advancement opportunities internally and externally.

HOW APPRENTICESHIP CAN SUPPORT EQUITY

"We need to start with the premise that everyone wants to succeed at work. Our job is to give people access and to develop them to reach their maximum potential."
Participant in JFF's March 2019 roundtable discussion

When apprenticeship programs that emphasize diversity and equity succeed, businesses may be inspired to think holistically and apply strategies that work well in apprenticeships across the entire organization. Many of the businesspeople we spoke to said that is what happened at their companies: Inspired and motivated by their success with equity-focused apprenticeships, leaders sought to scale best practices for equitable hiring and inclusive work environments to improve employee satisfaction and retention.

"It gave us the social capital to be able to do more and ask for more. We went to our leadership and shared our excitement and the opportunity to think about how to serve all employees with career services, upskilling opportunities, new pathways for advancement, and playing a leadership role in the community," says Kelly Wilczak, workforce program specialist at **Mercy Health + Saint Joseph Mercy Health System**. Ali Bokhari, managing director of the delivery network at **Accenture Federal Services**, echoes that sentiment, noting that Accenture's work in advancing apprenticeship opportunities for economically disadvantaged populations "is supported by its employees and by the community at large. We are thinking ahead about how we can devise new apprenticeship pathways to meet future skill needs in the tech space and stay nimble."

Some companies are reviewing broader policies and practices that affect the way workers are hired, enter a company, learn and grow on the job, and advance their careers. Those efforts can take a number of forms, including:

- Reviewing internal HR policies, particularly requirements that job applicants must have college degrees
- Using nontraditional training programs to expand opportunities for advancement to a wider population of employees
- Creating a more inclusive workplace culture

Applying lessons learned from implementing apprenticeship can help break down barriers and foster a more equitable environment in which opportunities for personal growth, career advancement, and opportunities to earn more money are accessible to more people throughout the organization.

Businesses also recognize that they must do more to change their overall workplace cultures to ensure that every employee feels engaged, valued, respected, and able to contribute. The many benefits of engaging all voices include new ideas, improvements in employee engagement and commitment on the job, and higher retention rates.

Career Advancement

Apprenticeship is just one specific approach to worker training and career advancement, but many of the elements that go into the design of a good apprenticeship program can inform other strategies for helping employees learn new skills and grow on the job.

Among other things, companies that have run successful apprenticeship programs learn to do the following:

- Focus on individuals' proven skills and competencies, not degrees and other credentials
- Pair workers with mentors
- Define clear avenues for career advancement

Defining job requirements based on needs rather than proxies. Rather than determining the actual skills and areas of expertise that people need to do a particular job and listing those among the requirements jobseekers must meet in order to qualify for a position, businesses often rely on degrees and other academic metrics as primary job entry requirements, without necessarily having evidence that they reflect the actual skills needed. Yet, a 2017 report titled *Dismissed by Degrees* notes that a phenomenon known as "degree inflation"—which the authors define as the increase in employer demand that people have four-year college degrees in order to qualify for jobs, even jobs that previously didn't require degrees—hurts companies by overlooking younger and older workers who are often more affordable.[8]

Apprenticeship programs provide an alternative hiring model that offers an effective way of ensuring that candidates have the key competencies they need to do a job. Companies that have experience seeing people learn new skills on the job have begun to note in job postings that candidates who don't have every single qualification listed are still welcome to apply.

Reinforcing lessons of the apprenticeship model, companies are reviewing degree requirements and revising language in job postings to be more competency-based. They are also educating hiring managers to avoid unconscious bias. Both **Aon** and **Zurich Insurance (North America)** reviewed their job descriptions to determine whether bachelor's degrees—or any college experience—was actually necessary. Their job descriptions clearly state the skills and areas of expertise required in an effort to find candidates with the appropriate qualifications for each position. At **IBM**, corporate "career frameworks" do not include degrees as requirements for advancement, giving workers greater opportunities for upward mobility. The company now uses the term "new collar" to reflect how IBM's HR mindset has shifted away from the distinction between blue- and white-collar jobs toward one that values a workforce with marketable skills and competencies, not degrees.

One barrier that currently curbs efforts to eliminate more degree requirements in companies that rely on government contracts is that federal procurement rules still often mandate four-year degrees.

Expanding onboarding programs and adding mentoring supports. At many companies, job onboarding has typically not been a priority and new hires haven't received much more than quick overview orientations and introductions to their teams. But now a number of companies are taking a lesson from the apprenticeship model and are designing more comprehensive onboarding programs, and some are adding mentoring arrangements to the lineup of supports they offer new hires, with the goal of helping new employees connect with and receive guidance from experienced colleagues. Steps like these help people navigate the organizational culture, develop social connections, and understand job expectations. Some companies are assigning sponsors as well as mentors. Whereas mentors help newcomers get acclimated, sponsors play a more ongoing role in advocating on behalf of the colleagues they are paired up with, helping them find advancement opportunities, secure pay raises, and have a voice in the company.

Catalyte has been expanding quickly, and its leaders are focused on maintaining a positive work culture. All of its developers mentor less experienced workers, and many also receive peer mentoring and coaching themselves. These learning communities help create a supportive work culture and encourage everyone to learn on the job and move up the ranks.

> **"Inclusion is more than just who comes in the door. It's the supports once you get here. Our job is to think ahead about how to build a diverse workforce for ourselves and to reflect the client base of the future."**
> *Participant in JFF's March 2019 roundtable*

Establishing clear career pathways. Being inclusive requires a transparent system to ensure that workers understand what they are expected to do in order to excel and advance. Too many companies lack ways to capture or assess the competencies and skills that workers learn on the job—skills that might make them eligible for higher-paying jobs. In contrast, some leading companies complement apprenticeship programs with other training opportunities to improve retention by helping people advance within the organization. Opportunities to learn new skills and move into leadership roles can have a big impact on an employee's desire to stay with an organization.

Lippert Components has a program called Dream Achiever in which personal development coaches work with frontline workers to help them set career goals and create concrete plans for moving into more advanced positions. For the last six years, **Dartmouth-Hitchcock** has been working to expand the flexibility of its certifications policies as a way of encouraging more workers to pursue training opportunities that lead the way to new roles that command higher pay. Leaders at **Mercy Health + Saint Joseph Mercy Health System** say the organization has built internal social capital through a successful apprenticeship program. The Michigan-based health care provider created the new role of workforce program specialist to lead the identification, design, implementation, and evaluation of workforce development efforts, including apprenticeships. With the help of a foundation grant, Mercy Health + Saint Joseph Mercy Health System is now creating an onsite career center to recruit and upskill new and incumbent workers.

Inclusive Workplaces

Advancement opportunities must not only be clearly defined; they also have to be welcoming and accessible to all employees. Companies can help ensure that all employees have equal access to advancement opportunities by cultivating an inclusive culture that extends throughout the entire organization. Some are doing that by adapting lessons about recruiting, training, and advancing diverse populations of employees that they learned from running apprenticeship programs that focused on diversity, equity, and inclusion. Key elements of those strategies include participation by top-level leaders, a focus on workplace culture, and the use of data for accountability.

Demonstrating leadership commitment to diversity and inclusion. Company leaders may shy away from talking about diversity because the topic can be hard, messy, and personal. Yet, as companies undertake what amounts to a change management initiative, there are a number of things leaders can do to demonstrate their commitment to the goal of improving diversity, equity, and inclusion. Among other things, they can assign people to lead diversity and inclusion initiatives, offer companywide diversity training workshops, and encourage open conversations about diversity. Leaders can also point out that there's a connection between equity and the company's bottom line. Companies that can show that it is cost effective to grow their own diverse talent will be better able to secure support for investments in efforts to make workplaces equitable and inclusive.

> **"Diversity is being invited to the dance. Inclusion is being asked to dance."**
> *Participant in JFF's March 2019 roundtable*

Building an inclusive workforce culture in which people from diverse populations feel welcome. Few companies have structures to ensure that people from different backgrounds who may not have taken traditional educational paths have a voice, and that everyone's perspective is valued, regardless of job title. However, employers are increasingly addressing that shortcoming by providing equity and diversity training for their staff. In addition, organizations interested in promoting equity regularly review their policies and practices to mitigate unconscious bias and create more inclusive workplaces.

Treehouse provides direct assistance to the companies that hire graduates of its coding apprenticeship, often engaging with them for three months after placement in hopes of fostering comprehensive change in their workplace cultures. This includes helping the companies choose mentors for apprentices and then training those mentors. Treehouse also offers a remotely delivered equity and diversity training session and engages with HR departments to help them examine their policies with an eye toward creating more inclusive and equitable work environments.

Using data to drive inclusion. Some employers assume that all workers have equal opportunities within their organizations but actually have no way of measuring whether that assumption is accurate. That's why some companies have started to collect data on how well various groups are represented across job categories and are giving themselves "inclusion scores." By collecting and monitoring data, companies have a way to measure success, and they can use the data as evidence to build a case for further implementation of diversity, equity, and inclusion efforts.

> **"If you don't measure it, you can't change it."**
> *Participant in JFF's March 2019 roundtable*

CONCLUSION

Businesses have made progress in expanding workplace diversity, including in their apprenticeship programs. Overall, most employers are still in the early stages of their efforts to improve equity and inclusion, but leading companies can provide insights into how this work can be successful. To create truly equitable apprenticeship programs, companies should consider a range of supports to help women, people of color, people with disabilities, and others who have experienced barriers that have prevented or hindered their efforts to train for and excel in good-wage, middle-skill jobs. Businesses should also leverage lessons they have learned in their efforts to improve diversity in apprenticeships to think more broadly about how to create workplaces that give all employees equal opportunities for success and advancement.

The work is ongoing, but it is in the best interests of businesses to embrace the kind of wholesale changes needed to retain and support workforces whose demographics match those of their customers and the communities they serve. The practices and ideas highlighted in this brief can spur other companies to take action and consider using apprenticeships as vehicles for recruiting, developing, and retaining diverse talent while filling a need for employees with hard-to-find skills.

ENDNOTES

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