

# IT'S TIME

Using **Modern Apprenticeship** to Reskill America



THE NONCONFORMING  
GEOMETRIC FIGURES  
IN THIS REPORT REFLECT  
THE COUNTLESS CREATIVE  
POSSIBILITIES OF MODERN  
APPRENTICESHIP

## MODERN APPRENTICESHIP

# IT'S TIME

Jobs without people. People without jobs. Employers are very much attuned to the existing mismatch between the skills employers need and the skills workers have. At the same time, prospective workers are embracing the college-isn't-for-everyone movement and looking for affordable alternatives to higher education.

**The good news: This skills gap equals unprecedented opportunity.**

Factors including globalization, economic reforms, and technological change are transforming the workplace and the types of jobs that will be offered in the future. Astute employers realize it's critical to have access to a well-positioned pipeline of workers with 21st-century skills. Along these lines, local and state governments are investing in programs and policies to expand career pathways.

Over the decades, I've built up an international expertise in changing the status quo in job skills training. It's what keeps me up at night—and also raring to go each morning. My perspective and approach are a galaxy away from where I started.

In the 1980s, my high school was focused on grades and college admissions. I liked to learn by doing and became disengaged from education. I couldn't see the relevance of classroom learning to my future in the workforce.

AMERICA NEEDS MORE  
EMPLOYERS TO EMBRACE THE  
MOVEMENT, JOIN THE JOB  
SKILLS REVOLUTION, AND  
CREATE APPRENTICESHIPS

My calling was elsewhere. I was good at doing things with my hands. So I signed up for an apprenticeship. I learned technical skills and people skills and honed attributes like adaptability, resilience, and a zeal for lifelong learning.

Just as I had options, employers also have options. Employers across the U.S. have an opportunity to rethink onboarding strategies and talent development. **One such opportunity is Modern Apprenticeship.**

In the following pages, you will meet employers who are embracing Modern Apprenticeship. These companies have a rock-solid commitment to skills development and are incorporating Modern Apprenticeship into their hiring and talent-development practices. Governments are also breaking new ground and facilitating the creation of Modern Apprenticeship programs with financial incentives and technical assistance.

Modern Apprenticeships are a powerful option not just for recent high-school graduates. Opportunities also exist for college grads, military veterans, and adult workers seeking a new start.

Using a range of local and international data sources as well as real-life success stories, this report provides you with a solid understanding of and insight into the Modern Apprenticeship's ability to build an enviable talent pipeline and presents practical advice on creating a Modern Apprenticeship program.

Like the nonconforming geometric figures on its pages, we are challenging our readers to consider what is and isn't possible—to rethink their talent-development and job-creation strategies, to adopt new perspectives on promising career pathways, and to abandon antiquated and inaccurate perceptions of Modern Apprenticeship.

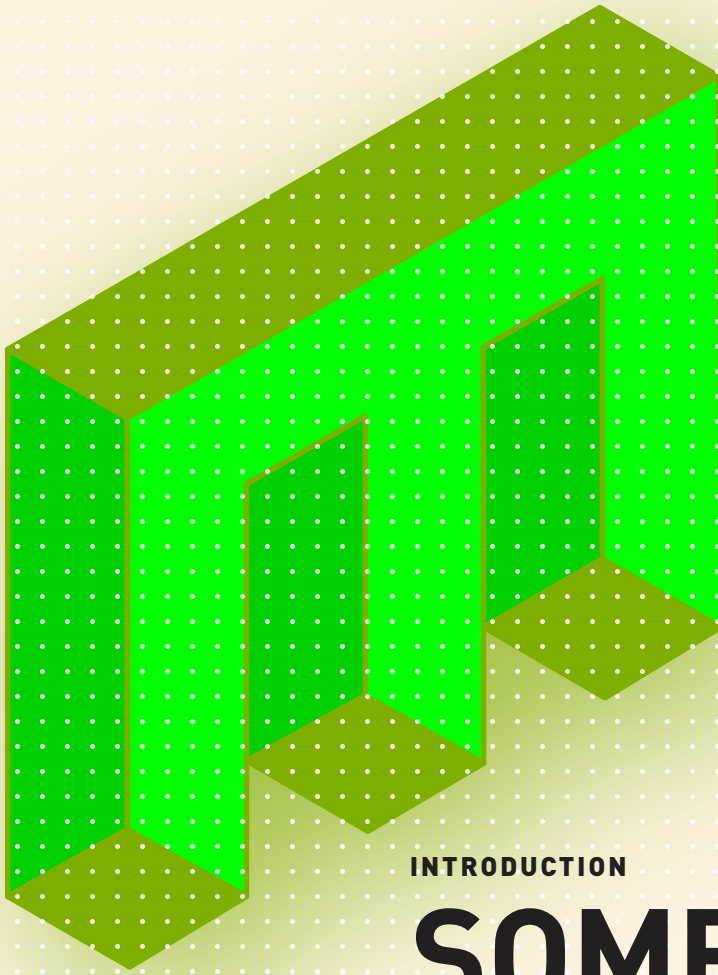
**NOW IS THE TIME.**

**Nicholas Wyman**

*CEO and Founder, IWSI America*

## TABLE OF CONTENTS

Introduction: <b>Something's Not Right</b> .....	4
Modern Apprenticeship: <b>Perceptions Are Not Reality</b> .....	8
The Skills Shortage: <b>The Way Out</b> .....	17
The Hiring Comfort Zone: <b>Breaking Out</b> .....	24
Future-Proofing with Modern Apprenticeship: <b>Your Bottom Line</b> .....	28
The Nuts and Bolts of a Modern Apprenticeship Program: <b>Getting Started</b> ..	33
Conclusion: <b>The Time Is Now</b> .....	36
Acknowledgments .....	38
Endnotes .....	39



## INTRODUCTION

# SOMETHING'S NOT RIGHT

While the U.S. economy is experiencing a golden age, with record expansion, record low unemployment, tightening labor markets, and record profit share and stock market prices, it is hampered by an urgent need for skilled labor. The U.S. Department of Labor estimates millions of vacancies exist in the American job market today.

Business leaders tell us, “We simply can’t find enough people who can do the job.”

The reasons are partly structural, partly locational, and partly cyclical. But the main reason is a lack of skills.

# 40%

OF U.S. EMPLOYERS CAN'T FIND EMPLOYEES WITH MUCH-NEEDED SKILLS <sup>1</sup>

# 60%

ARE DISAPPOINTED BY THE LACK OF PREPARATION FOR ENTRY-LEVEL JOBS AND BEYOND <sup>1</sup>

# 75%

OF 3,000 RECENTLY SURVEYED EMPLOYERS ACROSS ALL SECTORS REPORTED A SKILLS SHORTAGE <sup>2</sup>

# 92%

SAID THE SKILLS SHORTAGE WAS NEGATIVELY IMPACTING PRODUCTIVITY, STAFF TURNOVER, AND EMPLOYEE SATISFACTION. EMPLOYERS CITED A LACK OF AVAILABLE TRAINING AND DEVELOPMENT AS A MAIN REASON FOR THE SHORTAGE <sup>2</sup>

As indicated above, the methods traditionally used to grow workplace talent have failed to keep pace with employers' dynamic needs. In particular, the transition from education into employment—and, actually, the education system itself—is out of sync with the dynamic nature of business. Too few high school students are graduating with marketable skills, and a large number of college graduates are bringing little or no workplace experience to future employers. The retirement of baby boomers is also adding fuel to this well-stoked fire.<sup>3,4</sup>

As a result, we have too many Americans underemployed or sitting on the sidelines, waiting to be called into the game. Meanwhile, we're forfeiting too much economic growth and activity.

At the height of a boom like this one, some will foretell a bust. Others, like us, ask key questions:

- How do we keep up the momentum?
- How do we ensure that employers have the skilled labor they need to keep pace with the changing nature of work?
- How will the next generation of career pathways unfold so workers are prepared to meet employers' needs?



While our economy is hot and unemployment is low, employers are clamoring for skilled workers—and coming up empty-handed.

It's time for America to reboot its approach to growing talent. It's time for an approach that is high quality, business-relevant, and practical.

The key to America's economic success in the years to come will be a workforce that is agile and forever evolving.

## IT'S TIME FOR MODERN APPRENTICESHIP

# WHAT MAKES A MODERN APPRENTICESHIP?

A Modern Apprenticeship is a work-based training program aimed at preparing individuals of any age to meet sophisticated talent needs.

Why “modern”? Modern Apprenticeships are available in a broad range of 21st-century industries and occupations from cybersecurity, healthcare, and data analytics to hospitality management, green sciences, engineering, and advanced manufacturing.

Key components of a Modern Apprenticeship:

- Customized, supervised, and paid on-the-job training at reduced or no cost
- Wages graduated in step with skills gained during training
- Related classroom instruction (on or off site) to reinforce technical skills learned in the workplace
- Formalized mentoring and coaching
- Nationally recognized industry credentials or specialized technical certification earned for demonstrating the achievement of workplace competencies
- Optional college credit leading to an associate or bachelor’s degree at little to no additional expense

Modern Apprenticeship programs vary in length, depending on the employer and industry. Detailed work-based training components are determined by the employer or industry sponsors, and apprentices advance based on achieved competencies.

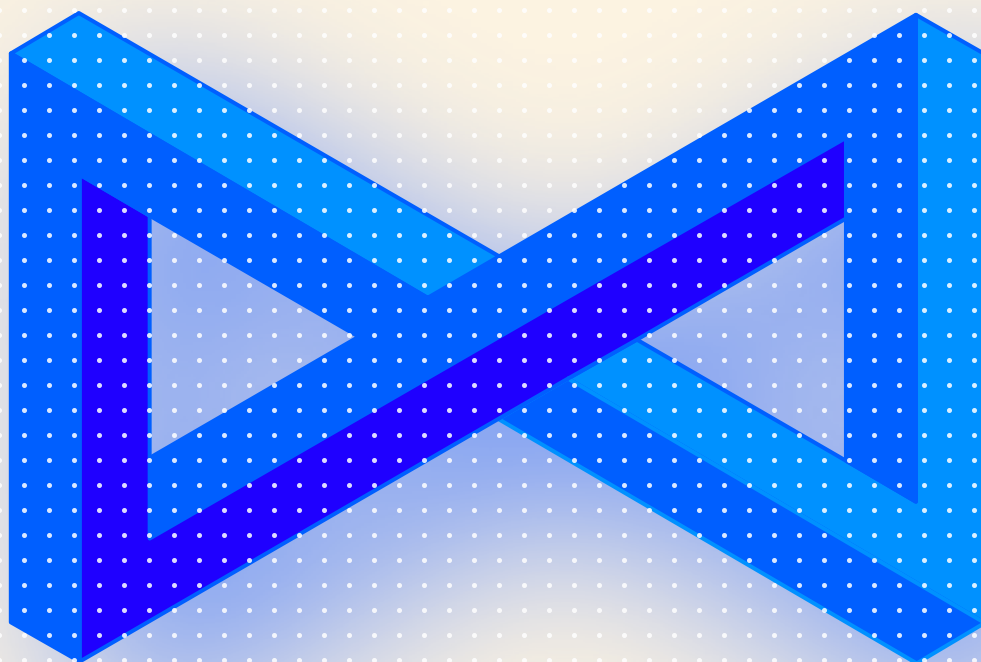
## FROM THE WORLD ECONOMIC FORUM'S *THE FUTURE OF JOBS REPORT 2018*

“Nearly 50% of companies expect that automation will lead to some reduction in their full-time workforce by 2022, based on the job profiles of their employee base today. However, 38% of businesses surveyed expect to extend their workforce to new productivity-enhancing

roles, and more than a quarter expect automation to lead to the creation of new roles in their enterprise.”<sup>5</sup>

Modern Apprenticeship enables workers to develop skills that continue to make them relevant in a world where learning never stops.





**MODERN  
APPRENTICESHIP**

# PERCEPTIONS ARE NOT REALITY

Most Americans believe that the best path to a lucrative career is a four-year college degree. However, this view is changing in the era of stratospheric college tuition and crippling loan debt. People are looking for a surer and less financially burdensome path. Those who have some knowledge of work-based learning embrace it.



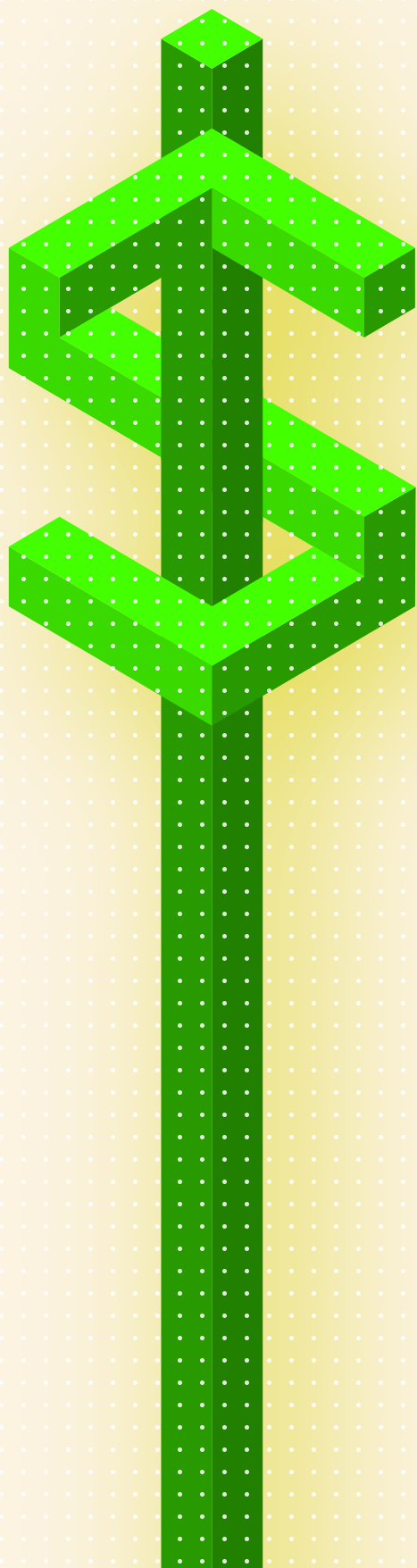
4 OUT OF 5 AMERICANS BELIEVE MORE PEOPLE SHOULD CONSIDER EARN-WHILE-YOU-LEARN APPRENTICESHIP PROGRAMS

A Harris poll of 2,000 adults reports:

- 92% of U.S. adults with an opinion about apprenticeships view them favorably.
- 4 out of 5 Americans believe more people should consider earn-while-you-learn apprenticeship programs, and 7 in 10 wish they knew more about such opportunities.
- 9 in 10 of those who were apprentices themselves or know someone who had an apprenticeship say the experience had a positive effect on that person's career.<sup>6</sup>

The practicality and adaptability associated with Modern Apprenticeship enable it to deliver substantive results across a spectrum of occupations. As indicated in the Harris poll above, many of those who know about work-based learning agree.

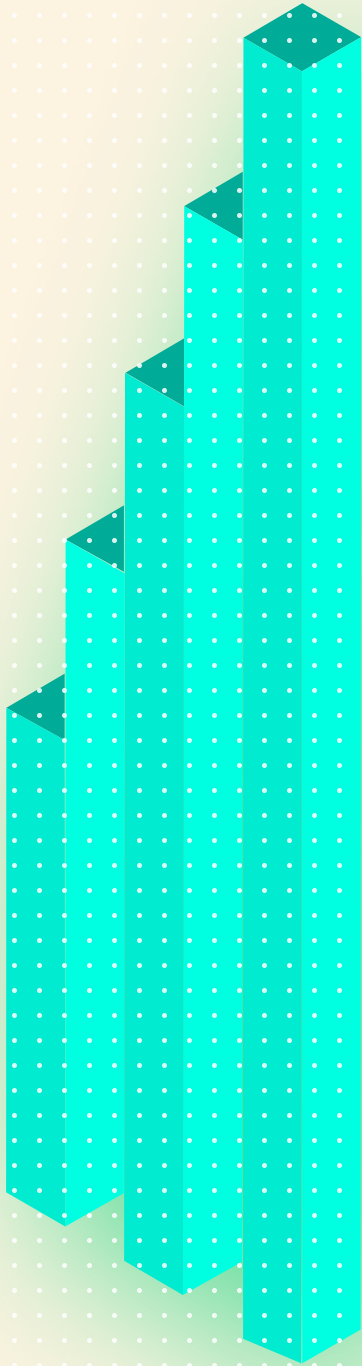
Myths around apprenticeship harm efforts to ramp up one of the most powerful skill-building tools for growing America's workforce. It's time to set the record straight.



MYTH ONE: MODERN  
APPRENTICESHIP  
GRADUATES EARN  
LOW WAGES  
**FACT: THE AVERAGE  
STARTING WAGE  
FOR APPRENTICES  
IS ABOVE \$60,000<sup>7</sup>**

Apprentices earn higher starting salaries than college graduates on average. In 2018, college grads could expect to make an average of \$50,390 annually.<sup>8</sup> This figure doesn't take into consideration the fact that degree holders will end up carrying an average of \$39,400 in student debt.<sup>9</sup>

Not only do most apprentices move directly into employment upon program completion, but they largely do so debt-free and are earning while learning. An astonishing 91% of apprenticeship graduates find employment almost immediately after finishing their programs.<sup>9</sup>

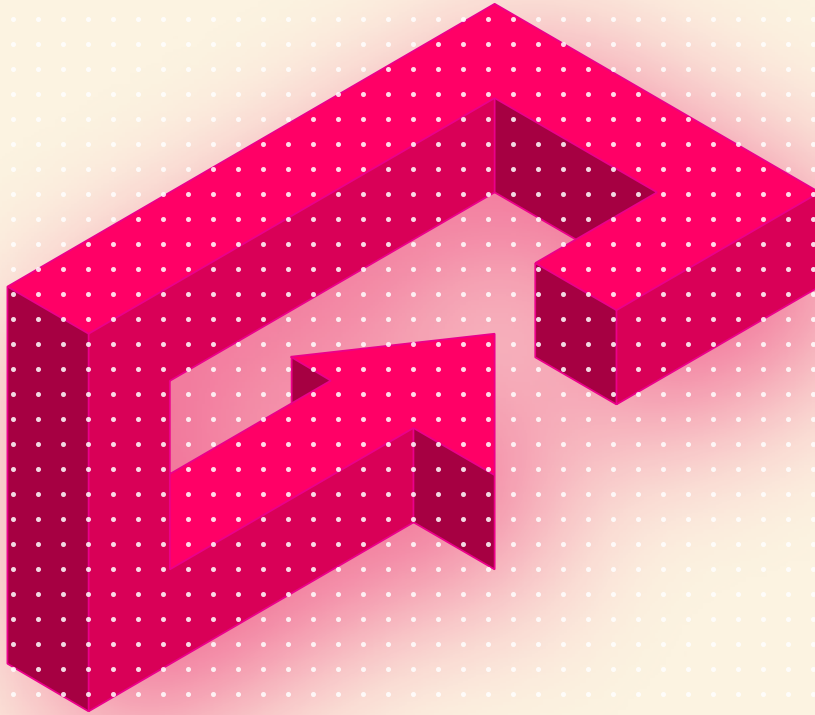


MYTH TWO: MODERN APPRENTICESHIP IS MOSTLY APPLICABLE TO “THE TRADES”

**FACT: MODERN APPRENTICESHIP OFFERS A BROAD ARRAY OF CAREER PATHWAYS**

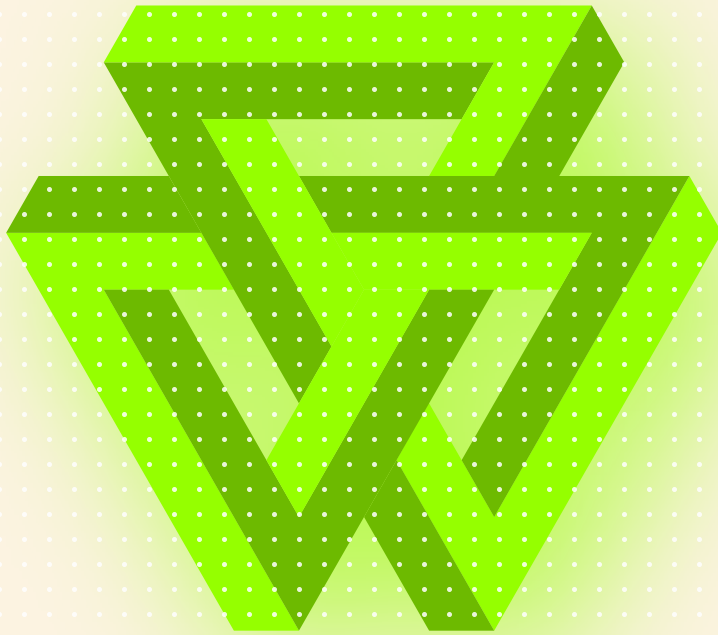
Historically, apprenticeships were almost exclusive to electrical, plumbing, carpentry, and other hands-on trades. This is no longer the case.

Modern Apprenticeship offers a broad array of career pathways. In fact, the list of companies now investing in Modern Apprenticeship includes LinkedIn, Lockheed Martin, JPMorgan Chase, Amazon, Nike, Dow Chemical Company, Interapt, Peterson Automotive Collection, CVS Health, and Black Oak Casino Resort.



MYTH THREE: MODERN APPRENTICESHIP PROGRAMS ARE A BURDEN ON COMPANY RESOURCES  
**FACT: COMPANIES UNANIMOUSLY CONCURRED THAT PROGRAM BENEFITS MORE THAN JUSTIFIED THEIR COSTS**

Just as any new business endeavor does, Modern Apprenticeship programs require an initial investment of time and money. However, in a study of the costs and benefits associated with Modern Apprenticeship, companies unanimously concurred that program benefits more than justified their costs.<sup>10</sup>



MYTH FOUR: MODERN  
APPRENTICESHIP  
IS LIMITED TO TECHNICAL  
SKILL BUILDING

**FACT: MODERN  
APPRENTICESHIP  
TEACHES INTERPERSONAL  
SKILLS ALONG WITH  
TECHNICAL AND  
ANALYTICAL SKILLS**

According to employers, interpersonal (“soft”) skills in particular are notably missing in many of today’s young job candidates. In McGraw-Hill Education’s recent Future Workforce Survey, over half of the more than 1,000 college graduates surveyed believed they were well prepared for the workplace in “essential career readiness skills”<sup>11</sup> like professionalism and work ethic (77%), critical thinking and problem solving (63%), and oral and written communication (61%). Employers’ perception of graduates’ career readiness was substantially lower: 43% for professionalism, 56% for critical thinking, and 42% for communication.<sup>12</sup> Technical skills aren’t a big issue for employers or college graduates. Interpersonal skills are.



MYTH FIVE: THE MODERN  
APPRENTICESHIP  
PATHWAY IS RIGID

**FACT: MODERN  
APPRENTICESHIP IS  
FLEXIBLE, ALLOWING  
FOR A VARIETY OF  
CAREER TRAJECTORIES**

One young adult may enter a Modern Apprenticeship program directly from high school and focus on a specific skill set; another may work for years in one occupation and then become a mid-career apprentice in a completely different field; yet another may combine a two-year associate degree with a certification and Modern Apprenticeship. Alternatively, a young person may enter a Modern Apprenticeship directly out of high school and later supplement that work experience with a four-year degree. The options are endless.

## **MODERN APPRENTICESHIP: ALL-IN-ONE AT ADOBE**

Amy Scoville is currently an Adobe employee. She earns a solid wage working in a 21st-century career as a software engineer. And Amy got there on her own terms after graduating from college. How did she get to where she is now?

Amy did well in college but ended up in work unrelated to her social science degree. She had a child during her final college semester, so after graduating she opted to stay home mostly, taking occasional temp jobs.

After eight years and much financial stress, Amy decided to seek full-time employment. She enrolled in an evening coding class to prepare herself. A few weeks before the course ended, she heard about and was accepted into Adobe's Digital Academy apprenticeship program.

The program was the perfect stepping stone to a new career. In the Digital Academy, Amy was supported by mentors and a close community of fellow participants. Upon completing the education component of the Digital Academy, Amy moved into the apprenticeship portion. She was subsequently hired as a full-time software development engineer at Adobe.

"My family and I are now living the life I dreamed about. Adobe's Digital Academy allowed me to break into the tech industry," says Amy, "and my job at Adobe now provides the financial stability, flexibility, and benefits that enable me to be a successful working mother."

Regarding her long-term goals, Amy says, "I really enjoy software development and would like to continue my career at Adobe. The role of principal scientist has piqued my interest, but I am keeping an open mind while I become more familiar with life as a software engineer and the accompanying possibilities." With Amy, Adobe has a committed employee who continues to realize her potential.

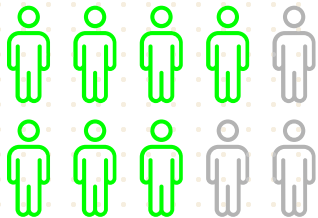
Adobe is ahead of the curve in building its pipeline of talent through Modern Apprenticeship. The company's Digital Academy has helped it open up new hiring opportunities, increase the diversity of its workforce, and mitigate bias in the tech industry. To date, Adobe has had a whopping 96% retention rate for its full-time Digital Academy hires.



IN SOME COUNTRIES,

# UP TO 70%

OF YOUNG PEOPLE MOVE INTO  
MODERN APPRENTICESHIP PROGRAMS



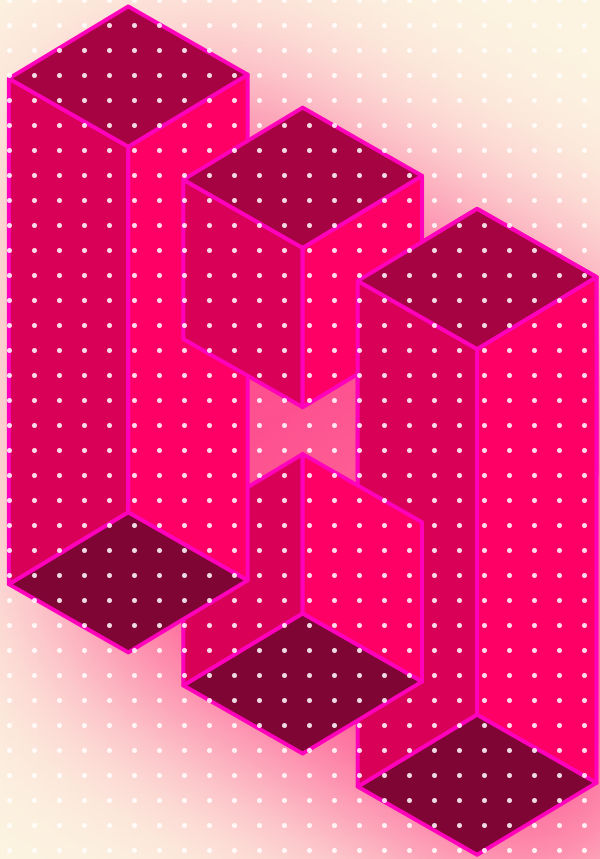
## WHAT OTHER COUNTRIES KNOW

Many wonder how Germany, a nation with high labor costs and a heavy emphasis on manufacturing exports, has managed to prosper and enjoy low rates of youth and adult unemployment in the face of globalization and economic shocks like the 2007–2009 financial crisis. (During the crisis, German unemployment was one-half to one-third the level of most European and North American peer countries.)

After careful analysis, policymakers determined Germany’s secret: a strong tradition of skills training and apprenticeships. Today, priority and prestige are given to students who pursue skills-based pathways into the workplace.

In fact, many countries have baked skills-based work study programs into school curricula. In some countries, these programs absorb a remarkable 50–70% of young people on their way to receiving a valued career credential or going to college later.<sup>13</sup> Upon graduation, a sizable percentage of these students enter company-sponsored Modern Apprenticeship programs. The best of these advance within their companies along either technical or management tracks.

The U.S. has taken note. Since 2016, the federal government has significantly increased funding for Modern Apprenticeship programs. Hundreds of millions of dollars are available to private sector employers, local and state governments, and nonprofits to initiate or ramp up apprenticeships and scale up this skill-building pathway.



## THE SKILLS SHORTAGE

# THE WAY OUT

College or bust? Not anymore. College delivers an outstanding career pathway for many but not for all. Consider this: Only half of college students complete their bachelor's degree;<sup>14</sup> of those who graduate, fewer than one third will work in jobs directly related to their majors; and one third of college graduates will work in “middle skills” jobs for which a degree is not needed<sup>15</sup> but sophisticated expertise is.



THERE IS NO ONE CORRECT CAREER PATH. A COLLEGE DEGREE IS IMPORTANT FOR SOME JOBS AND SOPHISTICATED WORK-BASED LEARNING IS PERFECT FOR OTHERS

What are some reasons for the disconnect revealed by statistics like these?

For one, the U.S. economy is undergoing rapid change. In many instances, automation and artificial intelligence are fundamentally altering the nature of work. Some believe we'll lose our jobs to them; others forecast we'll take them in stride, as we have done with other forms of modernization.<sup>16</sup>

Further, in the not-too-distant future, many roles will exist that we can't even imagine today. How do we prepare workers for these changes? Can post-secondary education keep up with industry's rapid changes? Should it be the one golden ticket for access to well-paying careers in high-demand industries?

There is no single "right" career path. A four-year college degree is essential for some, and colleges and universities are creating new majors to reflect changing industries like robotic engineering, cognitive science, electronic business marketing, social media, and organic agriculture systems.<sup>17</sup>

## **CVS HEALTH'S PRESCRIPTION FOR A STRONG WORKFORCE**

CVS Health is tackling the skills shortage in its industry with a registered apprenticeship program for pharmacy technicians. Like most other companies who have ventured into the Modern Apprenticeship arena, CVS Health is expanding its program. Why?

"Apprentice training brings our people up to full productivity more quickly," according to David Casey, Vice President of Workforce Strategies and Chief Diversity Officer. Low turnover among apprentices is an added benefit. After one year on the job, the turnover rate for apprentice-trained employees at CVS Health is 15%, a remarkable statistic for entry-level personnel in a retail environment, where 50+% first-year turnover is the norm. "Since the cost of recruiting and training a single pharmacy technician is approximately \$30,000," says Casey, "our cost savings have been huge."

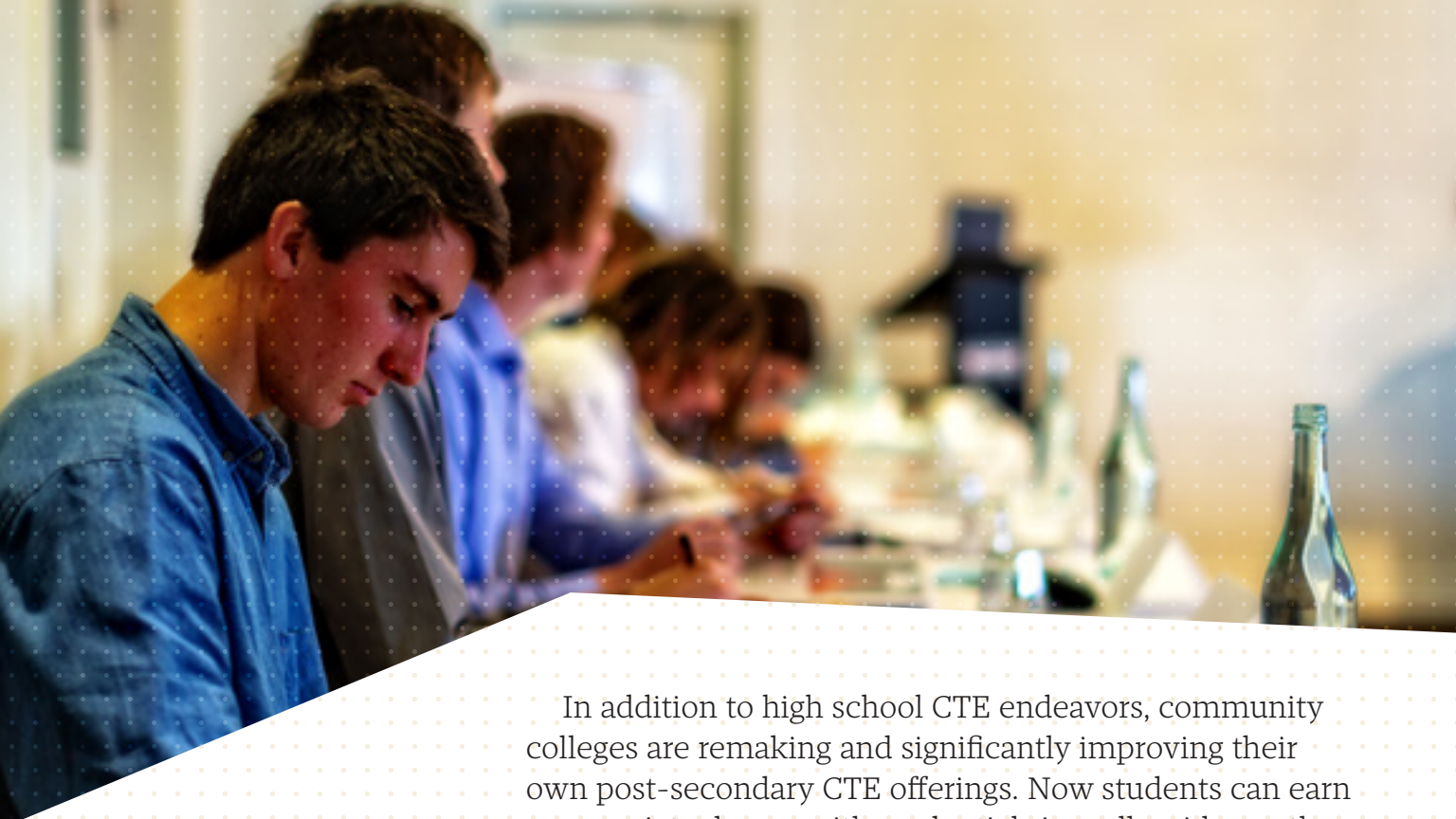
CVS Health, like other innovative companies, is taking full responsibility for making sure talent is in tune with its skills needs. CVS Health doesn't expect a diploma to provide new employees with the knowledge and experience that it takes to thrive in the company. Rather, as a result of its investment in a work-based education, or Modern Apprenticeship, the company is cultivating a pipeline of committed and very capable employees—and advancing elements that go into growing its bottom line as well.



WORK-BASED LEARNING  
PROGRAMS ARE MAKING  
A COMEBACK AS A NEW  
KIND OF CAREER PATHWAY

While a four-year college is one career path, in recent years high-school vocational educational programs have significantly advanced in terms of the sophistication of their curricula, types and breadth of participating industries, and credibility of resulting credentials.<sup>18</sup> These new and improved work-based learning programs have been rebranded as Career Technical Education (CTE) and are making a comeback. They're transforming themselves into a new kind of career pathway, with input from business professionals.

Accordingly, states like Massachusetts, Kentucky, Texas, and New York have doubled down on creating high school focused CTE programs or establishing technical high schools offering skills-based coursework. They are serving students who choose to go directly into the workforce or students who want to get a jump on a career, even if they later decide to go on to a two- or four-year college program. Most high school CTE tracks offer industry certifications and opportunities to earn dual (high school and college) credit towards an associate degree. Collaboration with local employers is routine. Those employers often help guide the curricula and may also provide students with internships.



In addition to high school CTE endeavors, community colleges are remaking and significantly improving their own post-secondary CTE offerings. Now students can earn an associate degree with credentials in well-paid growth industries like cybersecurity, medical technology, and veterinary and environmental sciences—often in conjunction with a Modern Apprenticeship.

While classroom studies and work-based learning are pillars of strong CTE programs, Modern Apprenticeship takes work-based learning to another level with opportunities to learn more advanced and specialized skills on the job.

The American Association of Community Colleges (AACC) and Department of Labor recently announced a \$20 million partnership to produce, in AACC president and CEO Walter G. Bumphus’s own words, a “newly imagined network of apprenticeships” over the next few years.<sup>19</sup>

The California community college system was one of the first to “get” the synergy between CTE and Modern Apprenticeships. By way of the California Apprenticeship Initiative, local employers, workforce boards, and California’s community colleges are powering up CTE through Modern Apprenticeship. While campuses provide classroom instruction to build and reinforce the theory behind and application of technical skills in the workplace (CTE), local employer-sponsors provide paid, full-time, on-the-job training (Modern Apprenticeship).



The goal of the California Apprenticeship Initiative is to place one million workers in middle-skills jobs, with an occupational associate degree, sophisticated know-how, and an advanced skill set in rapidly changing industries such as renewable energy, manufacturing, healthcare, and information and communication technologies.

## **WORK-BASED LEARNING PROGRAMS: WHAT'S THE DIFFERENCE?**

It's not uncommon to hear *apprenticeship*, *Career Technical Education (CTE)*, and *internship* used interchangeably. How do you tell them apart?

There are very few similarities between apprenticeships and internships. The latter is generally much more limited in scope than the former. Modern Apprenticeship involves a significant amount of applied work with people who are experts in their field, among other distinguishing factors. In fact, Modern Apprenticeship combines all the elements of the most valued workplace takeaways into one.

Simply put, Modern Apprenticeship augments the best components of CTE. It organizes classroom- and work-based learning around the knowledge and skills that specific occupations demand, and it offers deeper and more extensive on-the-job training than conventional internships do.

For workers, it creates a clear pathway to employment through a structured work-based learning program and builds interpersonal and technical skill sets through a sophisticated workplace experience.

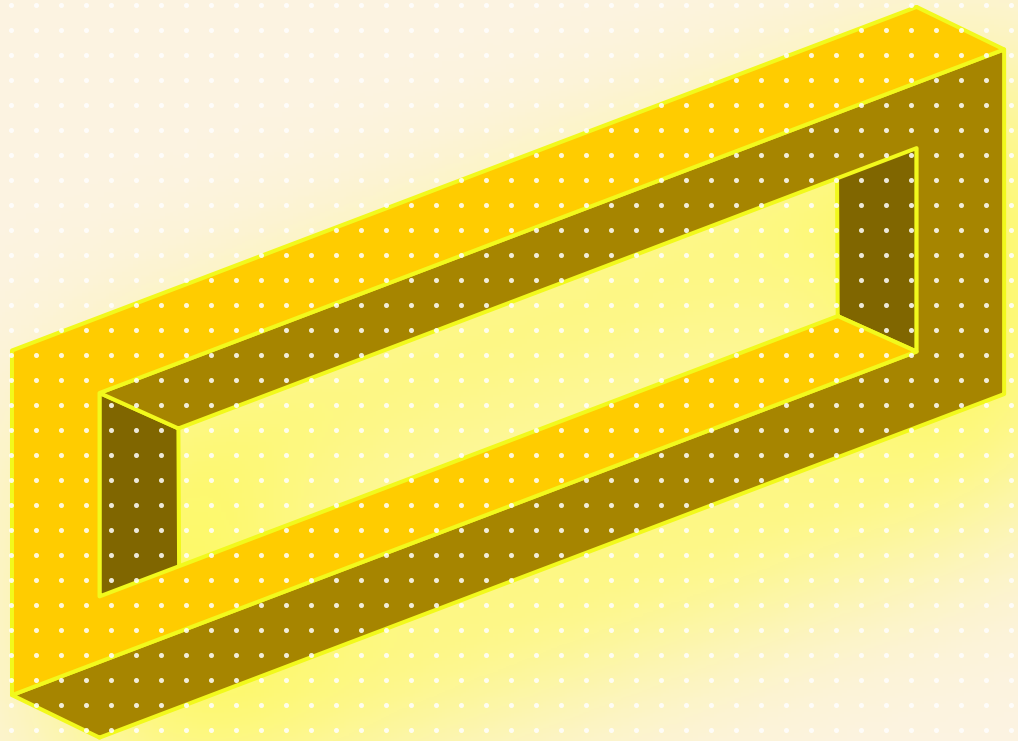
For employers, Modern Apprenticeship builds a highly skilled and customized, steady flow of talent, preparing workers who typically stay around for the long term.

## KEY DIFFERENCES

PROGRAM COMPONENT	MODERN APPRENTICESHIP	CAREER AND TECHNICAL EDUCATION (CTE)	INTERNSHIP
Hands-on industry experience	Yes	Usually	Yes
Structured on-the-job training	Yes	Sometimes	Sometimes
Earning while learning	Yes	No	No
Work-based and classroom learning	Yes	Yes	No
Full-time employment upon completion	Yes	No	No
Strong professional mentoring and/or coaching	Yes	No	No
Improved employability and interpersonal skills	Yes	Sometimes	Sometimes
Part-time and/or temporary employment upon completion	Sometimes	Yes	Yes
Associate degree	Sometimes	Sometimes	No
Nationally recognized industry credential upon completion	Yes*	No	No
Student debt upon completion	No	Yes	No

\* For Registered Apprenticeship programs





**THE HIRING  
COMFORT ZONE**

# BREAKING OUT

Because of the rapidly changing nature of work and the resulting need for people and organizations to constantly upgrade their abilities, employers must aggressively reevaluate their hiring and recruitment strategies.

In fact, a recent Harvard Business School (HBS) report on U.S. competitiveness and the middle class exposes the shortfalls of conventional ways of thinking about hiring. According to this report, an overwhelming number of companies default to hiring college graduates even though many report non-graduates with real-life experience perform critical job functions nearly or equally as well. There seems to be a disconnect between hiring practices and the growing number of middle-skills job openings.<sup>20</sup>

The HBS results underscore the need to develop talent pipelines through Modern Apprenticeship, local community college CTE programs, and workforce training institutes.

## **BUILDING A WORKFORCE CREATIVELY AT BLACK OAK CASINO RESORT**

Troy Andal entered Columbia College's program mid-career. He followed the school's hospitality management track and is now working at Black Oak Casino Resort. His employer didn't find Troy the typical way.

Troy headed back to college from two successful decades in the grocery business and decided to become a hospitality management apprentice. The lure of a solid, and more lucrative, career pathway and the promise of earning while learning were significant draws.

To enter the program mid-career, Troy said, "I had to drop my pride at the door and start all over. It took an act of courage and a little bit of humility."

The payoff was big for Troy and his employer. Along with on-the-job training, Troy took classes such as accounting, business law, and restaurant math—practical subjects with broad application. Now he is a valued hospitality supervisor and a strong member of Black Oak Casino's leadership team. He knows the company's business inside and out.

Forward-thinking states are also encouraging employers to develop innovative hiring practices.

In fact, in a relatively short time, the Commonwealth of Kentucky has amassed 3,700 active apprentices in nearly 270 Modern Apprenticeship programs—a treasure trove for employers. It's doing so to help its business community keep up with job projections. The Louisville Metro Government alone predicts 10,000 open tech jobs by 2020. Other kinds of industries like aerospace, automotive, civil service, advanced manufacturing, healthcare, and transport and logistics are also experiencing rapid growth.

Kentucky's Workforce Development and Education Cabinet is leading the way in helping businesses break out of their hiring comfort zone by steadily transforming the state's economic landscape with Modern Apprenticeship programs. And it's making it easy for businesses to participate. Many have praised the cabinet for profound changes made by a can-do administration. The cabinet delivers relevant and responsive guidance to employers who are launching Modern Apprenticeship endeavors and has built flexibility into the startup process, fueling an impressive uptick in program implementation.

Kentucky is also growing a robust pool of talent by engaging in vigorous program planning and curriculum building with community colleges, workforce development boards, independent school districts, and industry associations.

One such leader in Kentucky's Modern Apprenticeship movement is Interapt, a technology solutions company.

## **RETHINKING RECRUITMENT AND HIRING AT INTERAPT SKILLS**

Interapt's CEO, Ankur Gopal, explains the genesis of his interest in Modern Apprenticeship in Kentucky: "As a company that recruits and hires software engineers, it was difficult to draw senior-level people here. And because we are a cutting-edge business in the service industry, college grads weren't meeting our needs. They had lots of theoretical knowledge, but lacked experience and skills in the latest software development tools."

Interapt decided to address its shortage of skilled workers by training Kentucky residents. The company calls its Modern Apprenticeship program, Interapt Skills, a blend of classroom and on-the-job training with a strong mentorship component. Apprentices include career changers, veterans, displaced workers, and recent high school and college grads. Interapt Skills is also working with high schools to incorporate elements of its program into their curriculum.

When asked how Interapt Skills has affected his bottom line, Mr. Gopal responded, "Two years ago, we had a hard time convincing companies to consider apprentices in their hiring practices. Now we have over 40 companies wanting to sign our graduates, including Amazon, Genscape, Humana, TEKsystems, and GE Appliances. And we're expanding our apprenticeship models. We're targeting both rural and urban areas to lift local economies and reaching out to transitioning soldiers and their spouses." Interapt is pleased with its apprenticeship grads—most notably, their strong work ethic, appreciation and loyalty, and agile learning abilities. And 90% have received raises after 15 months on the job.



Finally, thanks to Kentucky's Workforce Development and Education Cabinet's ability to approach challenges in innovative ways, Kentucky is creating a new kind of Modern Apprenticeship intermediary, Group Apprenticeship Partnership (GAP), to help mostly small- and medium-sized companies establish, implement, and run their programs. Kentucky already has four GAPs.

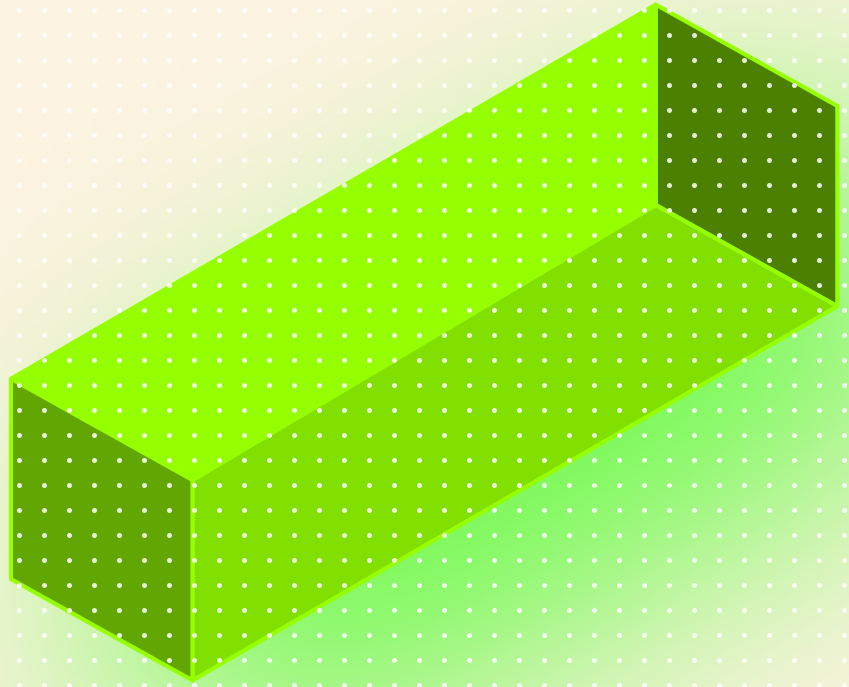
## **WHAT IS A GROUP APPRENTICESHIP PARTNERSHIP (GAP)?**

Although it is a new concept in America, Modern Apprenticeship intermediaries or the Group Apprenticeship Partnership (GAP) are proven and have an important presence in places with large-scale Modern Apprenticeship systems, such as Australia, Germany, Canada, and Great Britain.

A GAP typically:

- Is a community-based, not-for-profit organizations with a strong commitment to workforce development
- Takes care of most of the recruiting, training, and employing of workers, connecting job seekers to job vacancies
- Is responsible for administration of wages and employee benefits
- Lowers the risk of a mismatch between employer and apprentice and provides a safety net for apprentices who aren't able to complete the program with one employer (If an apprentice is not a good fit for an organization, the GAP will help find another opportunity.)

Employers pay a small management fee for GAP services.



**FUTURE-PROOFING WITH  
MODERN APPRENTICESHIP**

# **YOUR BOTTOM LINE**

Failing to recognize the value of Modern Apprenticeship is old-fashioned and, even more importantly, short-sighted.

In a seminal study on the costs and benefits of Modern Apprenticeship training—in companies ranging from technology, medical services, and automotive to engineering, manufacturing, and the trades—employers unanimously identified program benefits that more than justified their costs.<sup>21</sup> Why did these companies turn to Modern Apprenticeship? Employers couldn't find the labor to meet their minimum standards.



According to the companies studied, Modern Apprenticeship:

- Improved companies' overall performance
- Provided a competitive advantage in the marketplace
- Brought value through the much-enhanced productivity of apprentices
- Reduced turnover and increased employee loyalty, thus significantly reducing training and recruitment costs
- Enabled workers to better integrate into their business's culture and develop greater leadership potential
- Built a bench of highly qualified workers and future managers with demonstrated skills, experience, and strong work ethics
- Diversified their workforce
- Improved employee engagement, problem-solving skills, and flexibility in performing a variety of tasks, while reducing the need for supervision<sup>21</sup>

The report's authors put a dollar value on one of the programs studied at Dartmouth-Hitchcock Medical. Its apprenticeship investment nearly paid for itself within the first year.

## **MAILCHIMP'S DUAL-TRACK MODEL**

Mailchimp, a popular marketing automation platform, has an apprenticeship program with internal and external tracks. In 2013, Mailchimp's senior vice president of technology, Eric Muntz, and the company's chief culture officer developed the company's internal track to cross-pollinate and diversify its technology ranks and to provide growth opportunities to employees who had some technology training but felt underqualified to move up or wanted to explore new roles in the company. The program took off.

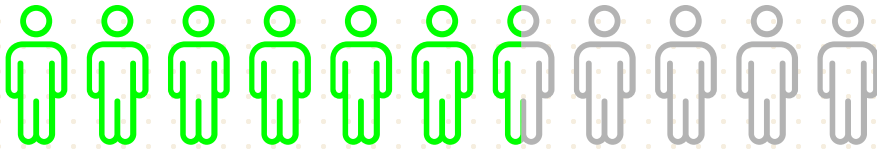
Mailchimp then decided to further diversify its talent pipeline from the outside and created its external track. However, reaching out to a new talent pool was daunting, so Mailchimp partnered with an intermediary organization, TalentPath, to recruit from the local community. Eric says, "TalentPath has the real beat on the local community and helps source local candidates."

TalentPath, the brainchild of entrepreneur Ryan Carson, runs an in-house pre-apprenticeship program at the front end (including training in and development of basic technology and job readiness skills) and has strong ties to formal apprenticeship training with its hiring partner companies at the back end. TalentPath's goal is to provide employers with candidates from communities typically underrepresented in the tech industry. All participants have at least a high school degree. Mailchimp's first external cohort consists of ten recruits.

In Mailchimp's Modern Apprenticeship program, every apprentice is given serious responsibilities at the get-go. Like each of its full-time software engineers, they build profitable products for its customers.

Forty-two employees have graduated from the internal track; all but four remain at Mailchimp in their new roles (and three of these four are still in their new profession). Mailchimp's commitment to its employees promotes loyalty, saving significant recruitment and training costs.

Mailchimp's core values are creativity, humility, and independence, and the company prioritizes diversity and inclusion. These priorities, along with the company's commitment to recruiting from the local community, enable it to succeed in growing a highly skilled and customized pipeline of talent.



# 59% OF 11,000+

**BUSINESS AND HR LEADERS SAY THEIR ORGANIZATIONS  
DON'T DO PROFESSIONAL DEVELOPMENT WELL**

The positive results from Mailchimp's first dive into Modern Apprenticeships via its internal program were recently reinforced by Deloitte's 2018 global survey of over 11,000 business and HR leaders on human capital trends:

*In a 21st-century career, the individual and his or her experiences take center stage. Instead of a steady progression along a job-based pathway, leading organizations are shifting toward a model that empowers individuals to acquire valuable experiences, explore new roles, and continually reinvent themselves. However, 59 percent of our survey respondents rate their organizations as not effective or only somewhat effective at empowering people to manage their own careers. Improvement in this area is essential to attract critical talent, especially as technology shifts the skills landscape.<sup>22</sup>*

Given Deloitte's findings, it's no wonder that Mailchimp's internal Modern Apprenticeship program and the opportunities it affords existing employees have resulted in high employee retention and job satisfaction—a significant yield from its initial outlay. Mailchimp's external apprenticeship track is also off to a good start.



## **EASYKICKS: WHERE INNOVATION MEETS ROI**

In addition to the financial costs of doing business these days, social responsibility plays a large part in evaluating the return on investment for many companies. For example, a substantial number are striving to shape a workforce that resembles the changing face of America—including EasyKicks with Nike, a burgeoning sneaker subscription service.

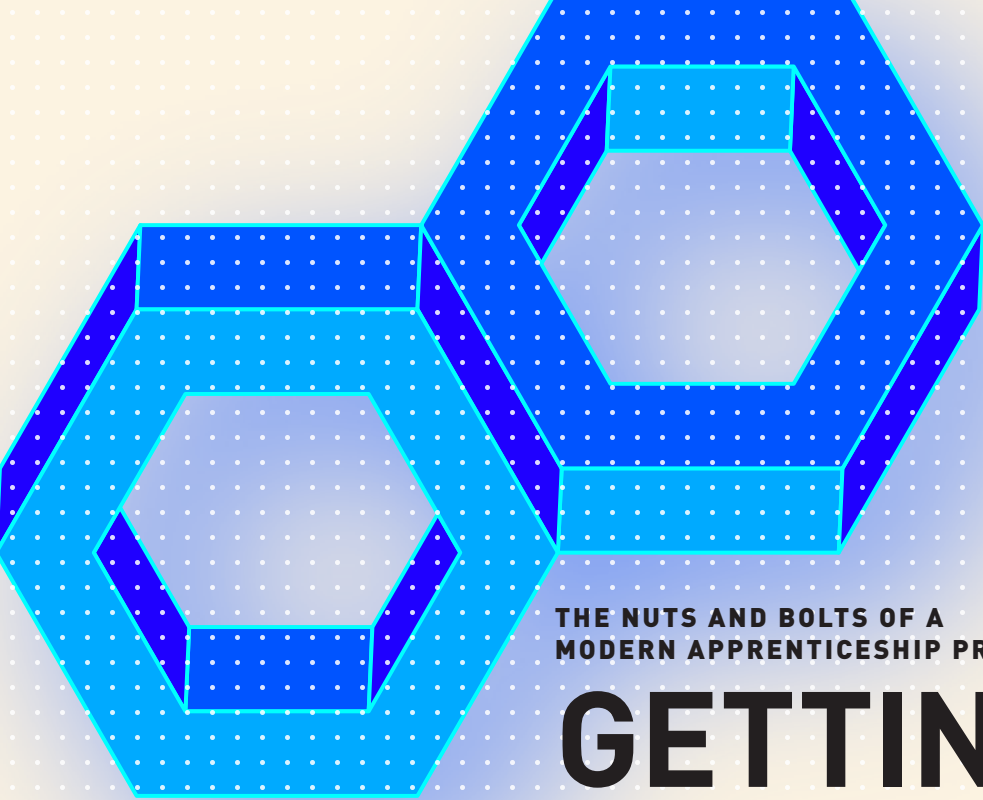
They are doing innovative work in the sneaker marketplace while incubating hiring ideas, skilling up, and bringing greater diversity to its workforce. As Alex Mestas, co-founder of EasyKicks explains, “We’re building a pipeline of talent with a demographic that reflects and will help grow our customer base for the EasyKicks division—young adults with an interest in athletic wear.”

Further, diversity means more to Alex’s group than its traditional definition. They believe a workforce with a wide range of experiences and ideas is equally critical to setting up the new division for success. “Many in the e-commerce world,” says Alex, “look alike, think alike, and have similar perspectives. EasyKicks values new and different kinds of experiences in its employees and believes it will create better products and services by being more inventive with its hiring practices.”

Enter EasyKicks’ apprenticeship program.

Their apprentices come from typically underrepresented groups in tech and are enrolled in a year of training in front-end development, writing code in particular. Apprentices have strong mentor relationships to assist in honing their technical skills. Coaches help apprentices with interpersonal skills such as asking questions, reducing anxiety about contributing ideas, and addressing relational challenges in the workplace.

What value does Modern Apprenticeship add to EasyKicks? EasyKicks is building its division a diverse talent pipeline that meets high technical expectations and has an intimate connection to its customer base.



**THE NUTS AND BOLTS OF A  
MODERN APPRENTICESHIP PROGRAM**

# GETTING STARTED

Modern Apprenticeship programs are not a one-size-fits-all proposition. There are several different approaches. The following tasks, however, are fundamental:

- Identify the apprenticeable occupation
- Identify and engage an internal team, including people from direct service, middle management, and leadership, to formulate and implement the program
- Identify and engage external partnerships to formulate and implement as well, including community colleges, high schools, civic and nonprofit organizations, state apprenticeship organizations, and others
- Identify mentors and coaches
- Outline candidate qualifications
- Identify achievable core competencies
- Create on-the-job training goals (performance measures) and related curricula
- Determine training and scalable wage schedules
- Establish marketing and recruitment strategies
- Develop ongoing evaluation processes based on feedback and outcomes

# 533,000+

APPRENTICES IN  
REGISTERED  
PROGRAMS  
NATIONWIDE

# 190,000

NEW APPRENTICES  
JOINED REGISTERED  
PROGRAMS IN 2017

# 64,000

APPRENTICES  
GRADUATED FROM  
REGISTERED  
PROGRAMS IN 2017

## REGISTERED AND NON-REGISTERED APPRENTICESHIP PROGRAMS

Modern Apprenticeship programs are either registered or non-registered. Each program is customized to meet the talent needs of an employer or industry.

### REGISTERED APPRENTICESHIP PROGRAMS

For over 80 years, the Registered Apprenticeship system has been providing guidance to employers on skilling up their workforce. The U.S. Office of Apprenticeship (OA) under the U.S. Department of Labor runs the system. Federal, state, and local governments offer employers expertise and a range of financial incentives to launch Registered Apprenticeship programs.<sup>23</sup>

Businesses are often encouraged to register their programs to ensure that their components and competencies meet national standards for quality and rigor and that the apprentice's skills are well-honed and relevant for top-notch performance.

Registered Apprenticeships require at least 144 hours of related technical instruction and 2,000 hours of on-the-job training, resulting in apprentices who are job-ready upon program completion. Graduates of a Registered Apprenticeship program receive a nationally recognized industry credential and, often, an associate degree. Most graduates are hired by sponsoring employers.

In many instances, the OA works in conjunction with independent State Apprenticeship Agencies (SAA) to administer their programs.



### **NON-REGISTERED APPRENTICESHIP PROGRAMS**

Many employers successfully establish non-registered programs. Some are described in this report. Like their registered counterparts, these programs combine technical education and work-based learning with a strong mentorship or coaching component. Because non-registered apprenticeship programs do not have any reporting obligations, there is no accounting of the number of programs or apprenticeships nationwide.<sup>24</sup>

The main limitation to non-registered programs is that the credential apprentices earn has no external validation. The principal advantage is that the employer is in complete control of their program.

Graduates from non-registered programs achieve a high level of technical competency and enter the workplace with well-honed interpersonal skills upon program completion. They are often hired by their sponsoring employer.

A Modern Apprenticeship program can be started in states without an SAA. Employers can find an abundance of information online or reach out to one of thousands of employer colleagues or industry associations using Modern Apprenticeship programs, or engage an intermediary or technical assistant provider to facilitate any part of the process.

Further, Group Apprenticeship Partnerships (GAPs), described above, work with businesses, industry associations, and governments to help establish and run registered or non-registered Modern Apprenticeship programs.



## CONCLUSION

# THE TIME IS NOW

“APPRENTICESHIPS NOT ONLY OFFER PEOPLE THE BENEFIT OF EARNING A WAGE WHILE LEARNING NEW SKILLS OR VOCATIONS, THEY ARE GOING TO BECOME AN ESSENTIAL ELEMENT OF RECRUITING, RETENTION, AND EMPLOYEE DEVELOPMENT PROGRAMS IN THE FUTURE.”<sup>25</sup>

**Richard Wahlquist**

*President and CEO of American Staffing Association*

Parents talk to us regularly about the arms race for college education, tuition increases, uncertainty about which industries technology will disrupt, and the ever-present specters of automation and artificial intelligence. They want advice on how their children can best find their way into prosperous careers and outstanding professional opportunities. This is when we tell parents about Modern Apprenticeship.



On the opposite side of the coin, employers we meet want information on ways to build their businesses with employees who know how to collaborate with colleagues, think critically, and keep up with the rapid transformation of the workplace. Most tell us that candidates can learn technical skills without too much trouble. However, interpersonal and analytical skills are not as easy to come by and are the defining characteristics of star performers. This is when we tell employers about Modern Apprenticeship.

With favorable economic conditions and accelerating changes to the nature of work, now is the time for employers, parents, policymakers, and governments to look more closely at the Modern Apprenticeship employment model—a training model which is widely used, popular, and deeply ingrained among our global industrial competitors. As John F. Kennedy famously said, “The time to repair the roof is when the sun is shining.”

## ACKNOWLEDGMENTS

The It's Time project benefited from extensive support, expertise, and guidance from a number of employers, educators, industry experts, and young people who gave generously of their time to share their experiences and insights with the research team. We are very grateful for their contributions to the project. Further, we truly appreciate the enthusiasm and interest of our Board of Directors in championing It's Time.

## ABOUT IWSI AMERICA

IWSI America is an international workforce development organization. Our product is Modern Apprenticeship. We offer an enlightened approach to growing a company's bottom line by creating a pipeline of top-notch talent to meet dynamic workforce needs. IWSI America delivers results through carefully cultivated partnerships in the private, public, and nonprofit sectors. We use our significant experience in all three sectors to bring untapped and unrealized resources, including positive brand recognition and government or philanthropic funding opportunities, to our clients. IWSI America and its global affiliates are currently skilling up 700 apprentices and trainees within a network of over 300 employer partners across a broad range of industries. Over 15,000 apprentices have successfully graduated from our programs.

## AUTHORS

**Nicholas Wyman** is CEO and Founder of IWSI America. He is the author of *Job U: How to Find Wealth and Success by Developing the Skills Companies Actually Need*

**Lisa Linowes Yates** is Director of Programs and Partnerships at IWSI America

**Simon Whatmore** is Chief Strategy Officer at IWSI America

Design **Tabaruba Design**

Photography **Hayden Brotchie**

Final Editing **Rogers Editorial Services**

## ENDNOTES

- 1 Laboissiere, M., and M. Mourshed. "Closing the Skills Gap: Creating Workforce-Development Programs That Work for Everyone" (February 2017). [www.mckinsey.com/industries/social-sector/our-insights/closing-the-skills-gap-creating-workforce-development-programs-that-work-for-everyone](http://www.mckinsey.com/industries/social-sector/our-insights/closing-the-skills-gap-creating-workforce-development-programs-that-work-for-everyone)
- 2 Hays Specialist Recruitment LLC. "Hays Survey Shows Skills Shortage Will Challenge US Employers' Ambitious Growth Plans" (January 30, 2018). [www.hays.com/press-releases/hays-survey-shows-skills-shortage-will-challenge-us-employers%E2%80%99-ambitious-growth-plans-2104620](http://www.hays.com/press-releases/hays-survey-shows-skills-shortage-will-challenge-us-employers%E2%80%99-ambitious-growth-plans-2104620)
- 3 The expectation is that an average of 10,000 baby boomers will retire each day between now and 2029.
- 4 Heimlich, R. "Baby Boomers Retire" (December 29, 2010). [www.pewresearch.org/fact-tank/2010/12/29/baby-boomers-retire](http://www.pewresearch.org/fact-tank/2010/12/29/baby-boomers-retire)
- 5 World Economic Forum. *The Future of Jobs Report* (2018). [www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs\\_2018.pdf](http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf)
- 6 American Staffing Association. "Apprenticeships Can Kickstart Careers" (June 21, 2018). [americanstaffing.net/posts/2018/06/21/apprenticeships-can-kickstart-careers](http://americanstaffing.net/posts/2018/06/21/apprenticeships-can-kickstart-careers)
- 7 Perez, T., and J. Zients. "ApprenticeshipUSA is Upskilling America" (October 21, 2016). [obamawhitehouse.archives.gov/blog/2016/10/21/apprenticeshipusa-upskilling-america](http://obamawhitehouse.archives.gov/blog/2016/10/21/apprenticeshipusa-upskilling-america)
- 8 Lobosco, K. "Starting Salary for the Class of 2018: \$50,390" (2018, May 14). [money.cnn.com/2018/05/14/pf/college/class-of-2018-starting-salary/index.html](http://money.cnn.com/2018/05/14/pf/college/class-of-2018-starting-salary/index.html)
- 9 Student Loan Hero. "A Look at the Shocking Student Loan Debt Statistics for 2018" (May 1, 2018). [studentloanhero.com/student-loan-debt-statistics](http://studentloanhero.com/student-loan-debt-statistics)
- 10 Case Western Reserve University. "The Benefits and Costs of Apprenticeship: A Business Perspective" (2016). [files.eric.ed.gov/fulltext/ED572260.pdf](http://files.eric.ed.gov/fulltext/ED572260.pdf)
- 11 NACE Job Outlook 2018.
- 12 McGraw-Hill Education "2018 McGraw-Hill Education Future Workforce Survey" (2018). [www.mheducation.com/future-workforce](http://www.mheducation.com/future-workforce)
- 13 Hoffman, Nancy. *Schooling in the Workplace: How Six of the World's Best Vocational Education Systems Prepare Young People for Jobs and Life*. Cambridge, MA: Harvard Education Press (2011).
- 14 Gewertz, C. "What Is Career and Technical Education, Anyway?" (July 31, 2018). [www.edweek.org/ew/issues/career-technical-education/index.html](http://www.edweek.org/ew/issues/career-technical-education/index.html)
- 15 Student Loan Hero "A Look at the Shocking Student Loan Debt Statistics for 2018" (May 1, 2018). [studentloanhero.com/student-loan-debt-statistics](http://studentloanhero.com/student-loan-debt-statistics)
- 16 Wyman, N. "Fear Not the Job-Stealing Robots" (June 13, 2018). [www.forbes.com/sites/nicholaswyman/2018/06/13/fear-not-the-job-stealing-robots/#1d3ae4945f5a](http://www.forbes.com/sites/nicholaswyman/2018/06/13/fear-not-the-job-stealing-robots/#1d3ae4945f5a)
- 17 Fishbane, L. "20 High-Paying College Majors You've Never Heard Of" (July 18, 2016). [www.forbes.com/sites/larafishbane/2016/07/18/20-high-paying-college-majors-youve-never-heard-of/5/#7f6fb653f979](http://www.forbes.com/sites/larafishbane/2016/07/18/20-high-paying-college-majors-youve-never-heard-of/5/#7f6fb653f979)
- 18 The Aspen Institute Skills for America's Future. *Recasting American Apprenticeship: A Summary of the Barriers to Apprenticeship Expansion* (2015).
- 19 Community College Daily. "AACC, DOL Partner to Expand Apprenticeships" (January 24, 2019). [www.ccdaily.com/2019/01/aacc-dol-partnership-aims-expand-apprenticeships](http://www.ccdaily.com/2019/01/aacc-dol-partnership-aims-expand-apprenticeships)
- 20 Fuller, J. B., and M. Raman. "Dismissed by Degrees: How Degree Inflation Is Undermining U.S. Competitiveness and Hurting America's Middle Class." Harvard Business School (January 24, 2019). [www.hbs.edu/managing-the-future-of-work/Documents/dismissed-by-degrees.pdf](http://www.hbs.edu/managing-the-future-of-work/Documents/dismissed-by-degrees.pdf)
- 21 Case Western Reserve University. "The benefits and costs of apprenticeship: a business perspective." (2016). [files.eric.ed.gov/fulltext/ED572260.pdf](http://files.eric.ed.gov/fulltext/ED572260.pdf)
- 22 Agarwal, D., J. Bersin, G. Lahiri, J. Schwartz, and E. Volini. "2018 Deloitte Global Human Capital Trends." Deloitte Insights. [www2.deloitte.com/content/dam/insights/us/articles/HCTrends2018/2018-HCtrends\\_Rise-of-the-social-enterprise.pdf](http://www2.deloitte.com/content/dam/insights/us/articles/HCTrends2018/2018-HCtrends_Rise-of-the-social-enterprise.pdf)
- 23 The Department of Labor's start-up toolkit is here: [www.dol.gov/apprenticeship/toolkit.htm](http://www.dol.gov/apprenticeship/toolkit.htm). Many of its elements are applicable to both registered and non-registered apprenticeship programs.
- 24 The Department of Labor's Office of Apprenticeships has no way of formally collecting data on non-registered programs. However, data collection is a part of registered programs' protocols.
- 25 American Staffing Association. "Apprenticeships Can Kickstart Careers" (June 21, 2018). [americanstaffing.net/posts/2018/06/21/apprenticeships-can-kickstart-careers](http://americanstaffing.net/posts/2018/06/21/apprenticeships-can-kickstart-careers)



All images are of actual apprentices and their employers in the IWSI network.\*

© IWSI America 2019

For further information, contact us at [info@iwsiamerica.org](mailto:info@iwsiamerica.org) or find us at [IWSIAmerica.org](http://IWSIAmerica.org)

\* Except for page 18, photo by NESA/Unsplash