

# APPRENTICESHIPS FROM COMMUNITY COLLEGE TO PROMISING TECH CAREER



# INTRODUCTION

Many employers in the United States are in a war for the talent they need. Meanwhile, millions of American workers are at risk of being left behind in an economy increasingly defined by technology and automation. These conditions hurt employers, potential workers, and U.S. competitiveness and economic growth. A solution is available: We can create new pathways for community college students to access better jobs through apprenticeships.

# EXECUTIVE SUMMARY

The United States job market is failing both employers and workers. While positions are plentiful in industries shaped by technological innovation and other dynamics, many potential workers don't have the skills companies require, and employers can't find the people they need. But there's a potential solution: Community college students, if given broader access to professional apprenticeship programs, would be able to develop the skills, experience and confidence to meet employer expectations, thereby closing the gap in our job market.

To help better achieve this outcome, we set out to understand what U.S. community college students expect from their careers and how much they know about the potential benefits of apprenticeships. The findings presented here show that a concerted effort by employers, educators and nonprofit partners to build and promote apprenticeship programs has the potential to fundamentally change the professional trajectory for millions of Americans—and the economy as a whole.

Our survey shows students are eager for training that prepares them for jobs with higher earnings and better career potential, but that many students feel their community college education fails to provide them with a pathway to in-demand jobs they often conclude are out of reach. A wide majority of students (80%) recognize they will need further training.

Yet while apprenticeships offer such training, too few students know about them. Once they're aware of them, they demonstrate a willingness to participate. Community college counselors share this enthusiasm and, what's more, are already familiar with the benefits of apprenticeships. These counselors are critical players and will help boost students' awareness of their opportunities and work with employers to establish apprenticeship programs.

Companies, counselors and community stakeholders all have an important role to play in our efforts to close the skills gap and transform the American labor market. □

# WHERE WE ARE: A MISMATCH IN THE JOB MARKET

The U.S. job market is failing both employers and workers, and we must reevaluate how we recruit, hire and train people in the United States.

We have more job openings than workers looking for work—in the U.S. there are 7.1 million open jobs and 5.8 million people in the job market without a job<sup>1</sup>—but many of those workers don't have the skills employers need.

While jobs are plentiful, many potential workers—including community college students—have limited paths to the positions that need to be filled. Degree requirements are one roadblock for the two-thirds of U.S. workers who don't have a four-year degree.<sup>2</sup> The perceived value of a college degree has increased, and the resulting "degree inflation" is both pricing and pushing too many workers out of the fastest-growing parts of the job market.

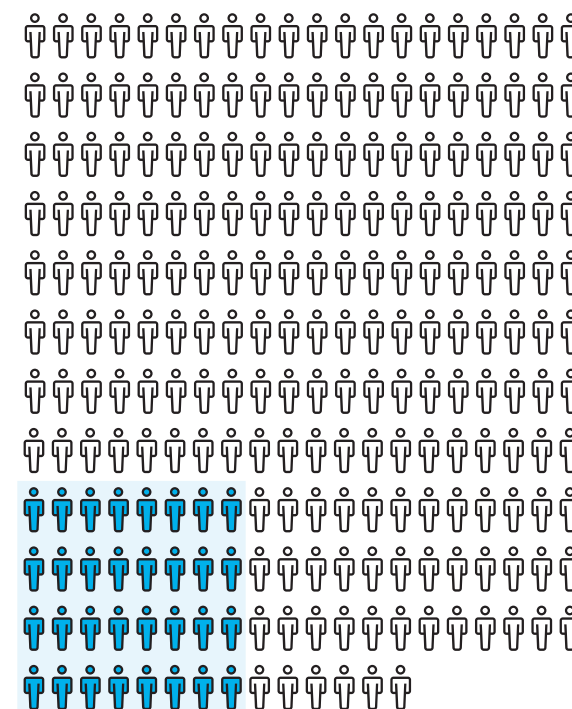
Another challenge: Many job seekers simply don't see themselves filling the roles employers have open, or they may not have access to skills development programs run by nonprofits, tech academies or others in their communities.

This is a setup for a frustrating future. Companies that want to grow seek workers with specific skills or qualifications who simply aren't in the hiring pool in sufficient numbers. Employers are also in search of workers who can help diversify their talent pool. Additionally, many who are looking for work are locked out of jobs where they could have greater opportunities for career advancement and long-term earnings growth. □

<sup>1</sup>U.S. Bureau of Labor Statistics, "Job Openings and Labor Turnover Statistics," (August 2019), and "Employment Situation," (September 2019). | <sup>2</sup>Joseph B. Fuller, Manjari Raman, et al., "Dismissed by Degrees: How Degree Inflation is Undermining U.S. Competitiveness and Hurting America's Middle Class," published by Accenture, *Grads of Life*, Harvard Business School (October 2017).

## Closing the Gap

Out of **23.4 million** job openings in 2016...



...an estimated **3.2 million**—or roughly 1 in 7—could have been filled through professional apprenticeship programs.

# WHAT WE HAVE LEARNED

Creating new pathways for community college students is one answer to the shortcomings and mismatches occurring in today's labor market. We surveyed 1,000 students in U.S. community colleges to better understand their job expectations and plans to advance their careers in an employment market increasingly shaped by automation and technology. We asked about their career hopes and concerns, and we examined their abilities. We also surveyed 200 community college counselors on these topics and on the prospects for expanding apprenticeship programs. *Further details on the demographics of the sample and our methodology appear in Appendix 1.*

Our goal was to better understand how wide-scale adoption of apprenticeship programs among employers, educators and policymakers can fundamentally change the trajectory for the millions of Americans who earn community college degrees. These earn-and-learn programs combine formal learning with on-the-job training and experience. What's more, they could help fill an estimated 3.2 million job openings,<sup>3</sup> giving people access to jobs they wouldn't otherwise have.

Our research confirmed that community college students are focused on getting jobs with higher earnings and better career potential but often don't see themselves as having access to the most in-demand jobs. Apprenticeships are one pathway to change both this situation—and the perception that students hold of their own potential.

## Among our key findings:

- Despite their aspirations, many students feel that their community college education fails to provide them with a pathway to in-demand jobs they often dismiss as out of reach. See **What Students Want** (section 1).
- Students see a need for further training beyond what's required to earn their degree to gain or improve their access to better careers and higher pay. See **What Students Want** (section 1).
- Student awareness of professional apprenticeships is low. But when students learn about apprenticeship programs, they see a path to gaining the skills and jobs they seek. See **Low Awareness, High Potential** (section 2).
- Students express a willingness to participate in apprenticeship programs and an optimism about potential benefits. See **Ready to Participate** (section 3).
- Counselors, too, believe in the value of apprenticeships. They are critical players in the apprenticeship system and can both boost student awareness and work with employers. See **Counselors as Apprenticeship Advocates** (section 4). □

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**When students learn about apprenticeship programs, they see a path to gaining the skills and jobs they seek.**

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<sup>3</sup>Joseph B. Fuller, Matthew Sigelman, "Room to Grow: Identifying New Frontiers for Apprenticeships," published by Burning Glass Technologies, Harvard Business School (November 2017).



# 1

## WHAT STUDENTS WANT

Students enter community college seeking to improve their prospects, but even after earning a community college degree, they expect to need further training to build skills, gain access to higher-paying jobs and develop their careers. Employer-based programs are at the top of the list when students describe the types of training they need to obtain.

Students report attending community college to develop skills and gain access to jobs they want. The top two reasons cited for entering community college are: to get a better job or career (52%) and to get a job with higher earning potential (40%). One in three community college students could be called “upskillers”—those returning to college after working for some time. Another 42% are coming straight from high

## 1. WHAT STUDENTS WANT

school, while 25% have taken a year off between high school graduation and college.

About half of students (54%) expect their income to increase after graduation, though such expectations are limited. Students reported their current median income as \$30,000 to \$35,000, and they expect to earn just \$5,000 more in a first job after graduation (\$35,000 to \$40,000). It's worth noting that the average starting income for a worker who completes an apprenticeship is about \$50,000, according to the U.S. Department of Labor.<sup>4</sup>

Just over one in three students (35%) strongly agree that their community college degree will get them a job where their employer invests in

them. A majority (59%) say their education will get them a job that pays the bills.

However, a wide majority of students (80%) say they will need more training, beyond their associate degree or certificate, to get the job they want. Students put employer-provided programs high on the list when asked about options for how they might get such training: 19% cite professional apprenticeships as a potential source, less than those who cite employer-provided formal training (26%) and internships (22%). Going on to get a bachelor's degree (25%) is the second-most common option.

Too many students (41%) aren't looking to attain in-demand technology jobs in areas

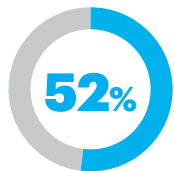
such as cybersecurity, application developer, data specialist and programmer/coder, among others, apparently limited by their sense of their own skills and what they could do in their future.

Among those who do aspire to these desirable jobs, a portion nonetheless sees hurdles: 14% of students say they aspire to such jobs but don't feel qualified: Of this group, 42% say they don't know how to break into these jobs; 41% say they don't have a required degree; 33% say they don't have required skills; 27% say they don't have access. □

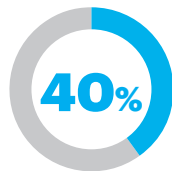
<sup>4</sup>U.S. Department of Labor, "Apprenticeship Toolkit."

### Students acquire an associate degree to...

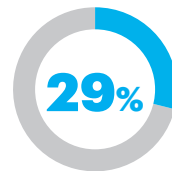
Get a better job or career



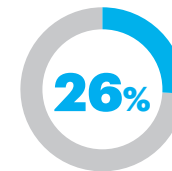
Earn more money



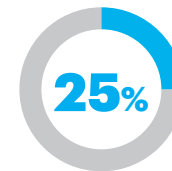
Prepare for the workforce



Prepare to get a bachelor's degree



Advance in current job



### ...but 80% say they'll need more training, including:

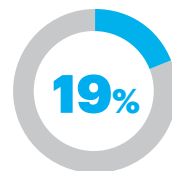
Employer-provided training



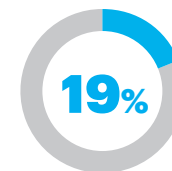
Internships



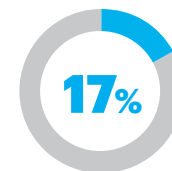
Online courses



Professional apprenticeships



Technical certifications



## An Inclusive Future of Work in Atlanta

Atlanta is one of America's fastest-growing job markets—and it is ground zero in the mismatch of talent and employer demands in the U.S.

Unemployment in Greater Atlanta is 3.5%—tied for the 20th-lowest metropolitan unemployment rate in the U.S. and in line with the U.S. average.\* At any given time, there are roughly 100,000 people looking for work in the region.

Meanwhile, employers are forecast by the Atlanta Regional Commission to add 1.2 million jobs in the metro area over the next 30 years—many in the city's fastest-growing sectors, such as health care, education, technology and professional services. The future demand far outstrips current supply.

The situation could become more dire as automation shifts labor demand to higher-skilled and more-credentialed positions. Some 19% of occupations, accounting for more than 300,000 Atlanta jobs,

are susceptible to high levels of automation, according to research conducted for Accenture's Inclusive Future of Work initiative. These positions, ranging from bookkeeper to cashier to laborer, are today very likely occupied by workers without bachelor's degrees.

The challenge, then, is to help these individuals develop skills and create career paths that lead to filling in-demand jobs—in a sense, future-proofing their skills.

Can these workers make the transition? There is good reason for optimism: In our research interviews, 80% say they are willing to embrace technology to expand their skills. Also, 46% of Atlanta-area community college students say they are seeking skills to get a better career, and 89% of Atlanta students say they expect to need additional training.

\*U.S. Bureau of Labor Statistics, "Local Area Unemployment Statistics," (August 2019).



# 2

## LOW AWARENESS, HIGH POTENTIAL

Even though most students acknowledge the need for more training beyond their community college education, their awareness of and participation in apprenticeships is low.

Just 8% of students have participated in an apprenticeship program, and the majority of community college attendees are unaware that apprenticeships are an option. Some 34% of respondents say they have heard about such programs, while 34% say they are unaware but interested, and 24% are simply unfamiliar and do not express interest.

However, when told about professional apprenticeship programs, students see significant opportunity.



## 2. LOW AWARENESS, HIGH POTENTIAL

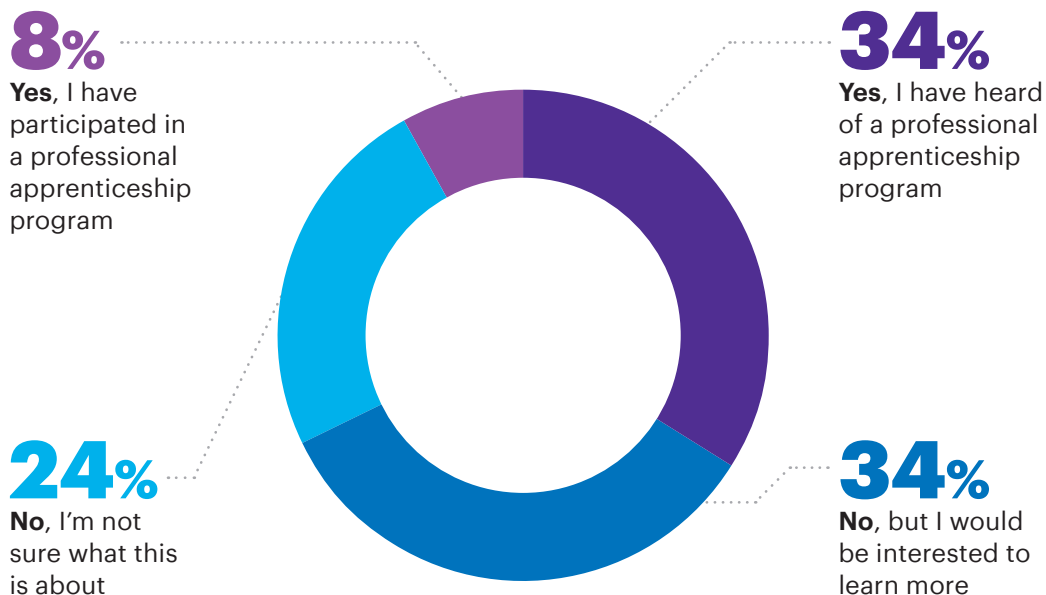
Among those who are attracted to apprenticeships, the major draws include the potential to add job skills and increase earning potential—and these advantages may help neutralize the low pay expectations they have for their two-year degree. Asked what motivated (or would motivate) them to participate, they cite gaining skills for the future (45%) and getting a job that pays better (40%). Students also say getting paid during an apprenticeship would motivate them (35%).

The fact that apprenticeships are paid is vital: Community college students have significant household financial and caregiving responsibilities, and an unpaid apprenticeship is often too much of a financial burden to consider. About a quarter of the survey respondents say they are the sole financial provider for their household, and women are more likely than men to be sole financial providers.

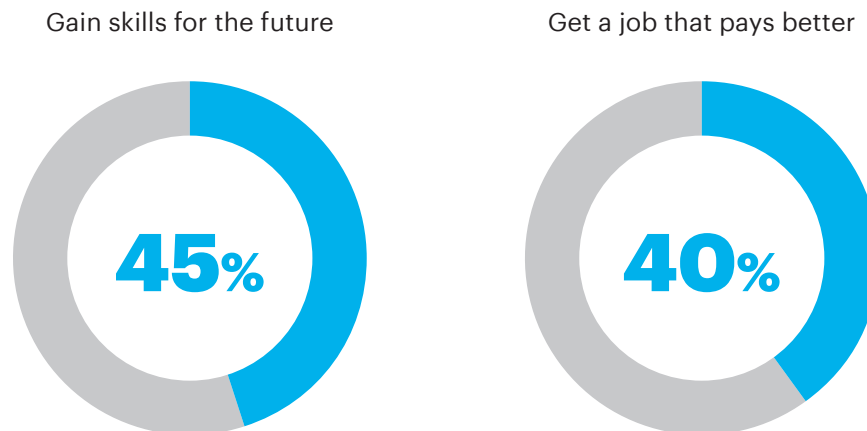
Additionally, nearly three-quarters (73%) of students plan to work while earning their two-year degree. Students may also need to better understand that apprenticeships are likely to lead to a full-time job offer at the organization where the apprenticeship occurs.

These issues were top concerns in the survey. Asked about potential hurdles to signing on to an apprenticeship, 32% of students say they are concerned about the heavy workload and their ability to balance school and work; 30% worry they won't be paid enough during the apprenticeship; and 29% say they fear not being hired at the end of the apprenticeship. In reality, almost nine out of 10 students who had participated in an apprenticeship report that the program led to a job offer at the same company where they apprenticed. □

### Awareness of apprenticeships is low...



### ... but those who are interested are attracted by the potential to:





# 3

## READY TO PARTICIPATE

Despite relatively low awareness of apprenticeship programs, once informed about them, students see the opportunities and are ready to participate. That said, there are disparities between white and/or male students and female and/or nonwhite students in their interest in apprenticeships. This means that all efforts to achieve diversity goals in businesses will depend on proactive outreach and recruitment among underrepresented demographic groups.

### 3. READY TO PARTICIPATE

The need for such outreach is made clear by the survey: Almost two-thirds (62%) of students who are not currently in apprenticeships say they would likely apply if one were available to them. However, women and minorities are less inclined to participate. Just 56% of female students say they would be willing to enroll in

an apprenticeship, versus 69% of male students; only 56% of nonwhite students say they would be ready to participate, compared with 63% of white students. Women are also substantially less likely than men to be aware of apprenticeships in the first place. □

## The Apprenticeship Experience

Students currently in apprenticeships report positive experiences, including the higher likelihood of a permanent job offer from the company where they were placed and better pay than they otherwise would have thought possible.

Among students in the survey who were involved in a professional apprenticeship, 77% had either taken a job with the employer where they did their apprenticeship or were still in the program. And among the remaining 23%, a majority were offered a job and turned it down, citing considerations including a better offer elsewhere or personal reasons.

A large majority (71%) of those who participated in an apprenticeship program say it led to a better job than they previously thought they could get. Asked in what way the job was better, they cite higher salary (40%), the acquisition of needed skills (37%) and full-time rather than part-time work (33%).

### Three-quarters of students who completed apprenticeships say it helped get them a job. Other positive outcomes included:

Securing a higher salary

40%

Acquiring needed skills

37%

Securing full-time rather than part-time work

33%

Expanded professional network

27%

More interesting work

23%

# 4

## COUNSELORS AS APPRENTICESHIP ADVOCATES

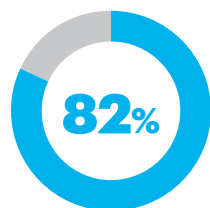
Academic advisors and career counselors are critical players in boosting student awareness and in partnering with employers to create meaningful apprenticeship-related curricula.

In contrast to students, counselors are well aware of apprenticeship programs and they see their value. They recognize that apprenticeships can help students in the following ways: gaining valuable skills for future jobs (52%); learning to work in professional environments (50%); accessing better careers (36%); and finding mentors (34%).

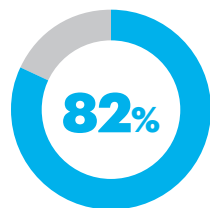


#### 4. COUNSELORS AS APPRENTICESHIP ADVOCATES

##### Counselors hold positive views of apprenticeship programs because:

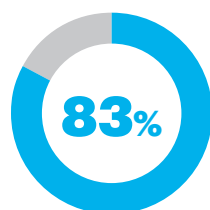


They give employers the ability to tap new talent pools

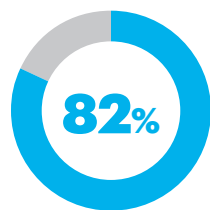


They give students a clear pathway to employment

##### And they believe employers should:



Provide more professional apprenticeship programs



Work with colleges to develop curriculum aligned with apprenticeships

Counselors agree with students who say in-demand jobs are viewed as being out of reach—and unfairly so. Most counselors (84%) say their students will be qualified for in-demand job roles, but 64% also say that students may be excluded from jobs they could do for lack of a bachelor’s degree. And 65% of counselors say workers without a bachelor’s degree will, at some point, be treated differently when it comes to career advancement.

Many counselors (45%) feel their students lack awareness of jobs that lead to career growth potential.

Counselors can be strong advocates for apprenticeships. They know their students’ abilities—and see the gap between jobs their students could perform successfully and the willingness of employers to hire them for those positions. Counselors view apprenticeship programs very positively and welcome their expansion. They overwhelmingly agree that apprenticeships give students a clear pathway to employment (82%) and offer employers the ability to tap new talent pools (82%).

Counselors say community colleges should work with employers on curricula aligned with apprenticeship opportunities (82%) and employer hiring needs (81%). Overall, 83% of counselors in the survey say employers should offer more professional apprenticeship programs. □

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**Counselors overwhelmingly agree that apprenticeships give students a clear pathway to employment and give employers the ability to tap new talent pools.**

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# NEXT STEPS: A PATH TO A BETTER LABOR MARKET

The research demonstrates how a high-potential but underutilized portion of our workforce could, through professional apprenticeships, find new opportunities, new career paths and greater prosperity. In the process, these workers would fill a major hole in our job market—a hole that is only going to grow wider if we don't address it.

The key is to make sure we connect students who want to accelerate their long-term career and earning prospects with employers who can't find enough workers with the skills or credentials, such as a four-year college degree, that they often require.

To help remedy this labor market mismatch, Accenture is spearheading a national movement to encourage companies across America to embrace professional apprenticeship programs.

Together with other companies and community stakeholders, Accenture aims to build a broad movement of employers who are committed to expanding opportunities for traditionally overlooked job seekers, building a deeper and more diverse pool of candidates, and transforming the labor market as a whole.

Here's how corporations—and community colleges themselves—can help:

## **Create apprenticeship programs.**

This is the heart of the matter: Corporations need to provide much more in the way of extensive professional apprenticeship offerings. Accenture partnered with Aon to cofound the Chicago Apprenticeship Network, which demonstrates that these programs work, benefiting employers and employees alike. From our experience in Chicago and in collaboration with the Business Roundtable, we created an apprenticeship playbook that focuses on key steps, considerations, examples and case studies for apprenticeships in professional positions.

## **Better communication.**

Corporations that offer professional apprenticeship programs need to do more to raise awareness. Community college students are prime targets for these programs, and our research shows their awareness of apprenticeships is low but their willingness to participate is high—once they learn about these opportunities. Community colleges also need to provide better information to students. The data here show a gap between what counselors understand about professional apprenticeship programs and what their students know.

## **More coordination.**

Community colleges are willing partners as we seek to expand professional apprenticeship programs. Colleges know their students, know their strengths and needs, and they can help students understand how a professional apprenticeship can complement their classroom learning. We know that community colleges are advocates for apprenticeships and stand ready to develop curricula that will support the needs of employers. The more companies and community colleges coordinate on this important issue, the more they both stand to benefit. □

# APPENDIX 1

## STUDY METHODS



The findings in this report are based on an online survey of students in U.S. community colleges, along with academic and career counselors at these institutions, conducted between the end of June and early August 2019. Our sample included 1,000 students and 200 counselors in the U.S.

Respondents include a mix of students located throughout the U.S who are currently attending or planning to attend community college. We targeted women and men from age 18 to 45 years with an income below the median household level (a maximum of \$60,000). The sample distribution reflects the national population in terms of ethnic makeup (African American/black, Hispanic, Asian, others). □

