Beyond Bootcamps: How Employers Can Help Nontraditional Learners Succeed

By **Amy Ahearn (Columnist)**
Dec 4, 2019

In the last six years the number of students graduating from coding bootcamps has reportedly increased 11-fold, to an estimated 23,043 in 2019. Encouragingly, some of these programs aim to bring more women, minorities, veterans and other underrepresented populations into the tech sector.

However, integrating diverse entry-level talent into non-diverse workplaces is far from straightforward. Many bootcamps hit road bumps as they try to build sustainable business models and figure out how to match graduates with job opportunities. In September, Andela, the African tech bootcamp, laid off 400 junior developers, citing market demand for more senior-level engineering talent.

Increasingly, bootcamps are discovering that it takes more than new financing options, job promises and teaching hard technical skills to enable graduates to succeed. Although everyone wants magic solutions that can transform high-school dropouts into Google engineers in six months, this rarely happens. Instead, just as K-12 educators have increasingly recognized

the importance of social-emotional learning, the bootcamp sector is slowly recognizing the need to address the underlying conditions that impact a student's ability to learn and succeed in a new career.

To pass technical interviews and survive the first months at a new job, coding chops are not sufficient. Students also need growth mindsets and grit to navigate the disappointment that inevitably comes with being rejected after an interview or receiving critical feedback on a code review. When you're new to an industry, it can be easy to take these experiences personally or feel like you're alone in making mistakes. To help graduates persist, Galvanize, a Denver-based bootcamp operator, intentionally incorporates growth mindset interventions into its curriculum so that students are equipped to realize these feelings are not insurmountable.

Similarly, Adobe worked with consulting firm Paradigm to incorporate growth mindset practices into its apprenticeship program designed to bring candidates from underrepresented backgrounds into engineering roles. According to its open-source playbook, Adobe teaches this so that apprentices can "learn quickly from their mistakes and build confidence." They found that, particularly when apprentices are entering a company where they may have less experience than other engineers and may not be selected for a full-time role after the apprenticeship ends, the approach can help to foster strategies for resilience.

Growth mindset and grit are hardly new concepts, having emerged from the labs of researchers Carol Dweck at Stanford and Angela Duckworth at Penn and entered the zeitgeist in K-12 and higher education, but they can be particularly effective for new hires from nontraditional backgrounds who might experience stereotype threat, or the pressure people face when worrying they will confirm negative stereotypes about their racial, ethnic, gender or cultural group.

Fostering mindsets like resilience and grit can help students overcome some of these challenges. However, the tech industry should be careful not to put the onus for overcoming structural inequity on the shoulders of bootcamp graduates alone. Employers also need to realize that their entire teams should play a role in creating more-inclusive cultures.

It can be incredibly intimidating to enter workplaces staffed with engineers from Carnegie Mellon and Stanford if you've just finished a six-month bootcamp, or if you are a developer in Lagos suddenly brought into a team based in San Francisco. The burden should not be solely on these new hires to fit in or "catch up." Employers need to be willing to invest in this talent after they hire them—and to recognize that the companies might need to change the way they train managers and onboard teams.

Treehouse, an online coding bootcamp, runs an apprenticeship program that can be a model for how tech companies can take the initiative to make their workplaces more inclusive. The program mandates that any employer receiving apprentices also needs to take part in a Diversity, Equity and Inclusion training, which research shows consistently contributes to the retention of new employees.

In the same way that nonprofits like Beyond12 and charter schools like KIPP have realized that it is not sufficient to help first generation students get into college—they also need to support them to succeed once they're enrolled—alternative education providers should be exploring similar wraparound models that keep in touch with graduates after they've landed a job. Financed by employers, these follow-on services could support nontraditional candidates in their first years. Usually, when new hires succeed, so does the company.

The COOP program is a model of what this could look like. In addition to offering training in digital marketing and data analytics, the nonprofit provides participants access to social workers who support nontraditional candidates as they take on tech jobs for the first time. Through one-on-one sessions, the counselors help students navigate the stress and feelings of imposter syndrome that can come when you do not see many other people who look like you in your workplace. The program also features a peer-driven model that brings graduates of the program back to lead training and offer support to current participants.

Employers need to be shifting from a mentality of recruiting rockstars to building enabling environments, where capable individuals from across neighborhoods, cultures and countries can fully contribute. Bootcamps are a good first step to equipping students with technical skills. But if companies want to help people from underrepresented backgrounds achieve economic mobility over the long term, they'll need to make ongoing investments.

This doesn't have to be hard. Employers could take steps like:

- Supporting nonprofits like COOP, Project Basta and Braven that offer career support to first-generation college students transitioning to their first jobs
- Funding affinity groups within large companies that can offer support to new hires from underrepresented backgrounds
- Training managers and teams in practices to build more-inclusive cultures
- Building holistic apprenticeship programs that offer on-the-job training and other resources to help new hires feel less isolated as they gain technical skills

Employers would be wise to make these investments. The competition for technical talent is getting tighter. The future lies with companies willing to help the most people produce the most valuable work.

https://www.edsurge.com/news/2019-12-04-beyond-bootcamps-how-employers-can-help-nontraditional-learners-succeed