



Written Testimony
Committee on Small Business
Subcommittee on Contracting and Workforce
“Workforce Development: Advancing Apprenticeships for Small Business”

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Thank you for the opportunity to share insight into the important role apprenticeships play in closing the skills gap and strengthening America’s workforce. At [LaunchCode](#), we see the importance of apprenticeship initiatives every day and the impact they have on both our students and our hiring companies.

This conversation is paramount - not only is America facing a serious skills gap and workforce crisis, but at the same time, millions of Americans are unemployed or stuck in cycles of low wage employment. In the tech industry, the numbers paint a more troubling image. [Code.org](#) estimates there will be one million more computing jobs than applicants who can fill them by 2020.

It’s a complex problem in need of an innovative solution. At LaunchCode, we have leveraged our unique education and apprenticeship program to reinvent the way individuals learn their trade and challenge the way companies hire and retain talent. Apprenticeship programs like LaunchCode’s across industries equip our workforce with more accessible training and in turn minimize the skills gap currently threatening our country’s economic future.

Limitless Opportunity: The LaunchCode Mission

[LaunchCode](#) is a national nonprofit creating pathways to economic opportunity and upward mobility through job-focused education, apprenticeships and job placement in technology. LaunchCode’s process is unique in that we specialize in identifying talented, driven individuals who often lack the traditional credentials for a job in technology. In fact, 99% of our students do not possess a degree in Information Technology or Computer Science. We believe opportunity for a career in technology shouldn’t be limited to those who can afford a traditional four-year degree program.

Our education programs not only focus on specific programming languages high-demand in the tech industry, they offer job-readiness skills to equip students with the crucial skills needed to succeed in the workplace. LaunchCode then matches individuals with one of our 500 employer partners, ranging from small startups to Fortune 500 companies, for a paid apprenticeship where they are paired with a mentor that invests in the growth and success of the apprentice.



Revolutionizing Hiring

Founded by Jim McKelvey, co-founder of Square, LaunchCode was established to address the urgent need for economic opportunity and technology talent in the region. When founding Square, McKelvey experienced firsthand the lack of access to technology talent in St. Louis. Companies in the region compete to attract a limited number of programmers, creating a talent deficit that limits opportunity and growth. Employers lack a way to find skilled, new tech talent from all backgrounds and walks of life.

LaunchCode found that in order to solve this problem and widen the pool of qualified individuals, our curriculum needed to go beyond technical skills and focus on preparing individuals to enter the workforce. Through interview preparation, workshops, group projects and individualized coaching, students are given the soft skills to leave LaunchCode job-ready. Our evaluation process ensures that companies who take on an apprentice are getting someone who has been trained to fit their environment and add value to their team.

LaunchCode's apprenticeship model creates an alternative and flexible recruitment pathway to help individuals from diverse backgrounds find employment, and at the same time, de-risks the hiring process for employers. On average, employers only speak with three LaunchCode candidates before finding the apprentice that is the perfect fit for their team. Once matched, companies mentor the apprentices, and, if they determine that the candidate is a good fit, transition them into permanent placement at the end of the program. To date, LaunchCode has used its apprenticeship model more than 1,000 times to place aspiring developers into a first job in a tech career.

The model puts companies in control, allowing them to integrate apprentices into their workspace and mold the apprentice's skills to fit their needs. At the same time, apprentices benefit from earning a livable wage while gaining real-world work experience and the chance to further develop their skills. Our method has proven to be successful on both ends - more than four of our five LaunchCode apprentices are hired on as permanent employees.

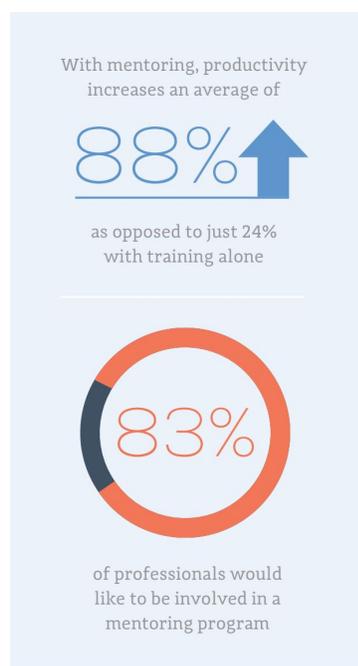
“We recognized an intriguing opportunity to (work with LaunchCode) to match, through our apprenticeship program, second career folks with our need for COBOL programmers. These people have an unmatched enthusiasm for their roles and are filling a gap that was otherwise hard to fill. They are quite productive. It is a powerful win-win situation.”

-Neal Sample, COO of Express Scripts



Mentorship: The Benefits are Twofold

LaunchCode knows the key to successful apprenticeship initiatives is the relationship between the apprentice and the employer. Mentorship within a company benefits everyone involved. It allows the apprentice to adapt faster and quickly learn the explicit and unspoken rules and norms critical to succeeding in a new environment. They learn how to accept feedback in important areas such



as communications, technical skills, change management and leadership skills. Companies with mentorship programs experience lower turnover, improved leadership skills, higher job-satisfaction and engagement rates and better collaboration among teams. The process allows mentors to play an active role in shaping the way knowledge and skills is spread throughout their organization, giving them a sense of ownership over a company's mission and goals.

In a study, Robert Walters Recruiting [found](#) that 83% of professionals would like to be involved in a mentoring program, yet only 29% are in workplaces that offer them. Mentorship between a senior employee and an apprentice has been proven to have a positive effect on a company's bottom line, as well. In 2016, the U.S. Department of Labor [predicted](#) for every \$1 spent on an apprenticeship, employers gain \$1.47 in return through increased productivity and greater innovation.

Apprenticeship and the Talent Gap

The U.S. Department of Labor's Employment and Training Administration reports [533,000 total individuals](#) nationwide who participated in an apprenticeship in 2017. This number is dismal, especially when compared to the [13.3 million individuals](#) enrolled in four-year colleges and universities. There is a robust pool of individuals ready and willing to learn the skills needed by employers. Apprenticeship programs provide employers with an untapped source of skilled individuals, many of which may be passed over in a traditional hiring process.

Closing the skills gap, especially in the tech industry, and adding more pathways that lead directly to jobs is imperative to ensure prosperity across our country. At LaunchCode, we believe the answer lies in accessible accelerated training and apprenticeship initiatives supported by mentorship. However, it's not a job one organization can tackle alone. It takes collaboration with workforce agencies, public institutions, and educators to create a sustainable pipeline of talent for a strong and diverse future workforce.



Expanding and Improving Apprenticeship in Tech

In four years of existence, LaunchCode has sought to increase the adoption of apprenticeship by employers hiring for middle to high skill technology occupations, such as software developer. In 2017, 124 employers used LaunchCode's process to hire new tech talent into their organizations, with the most prolific employer partner bringing on more than 60 apprentices. Through this experience, LaunchCode has identified principles we believe are key in broadening use of apprenticeship, particularly in technology.

Flexibility

Because of the vast and continually growing number of technologies, frameworks and programming languages, different employers hiring for technical roles, even roles with the same nominal job title, are frequently looking for very different skill sets. The traditional model of trades apprenticeship, with its reliance on standards that are often virtually identical across employers in a specific occupation, is not a good fit for tech occupations like programming. Further, the traditional model of employer-sponsored apprenticeship programs creates practical barriers for tech hiring, much of which happens within small entrepreneurial or startup firms that cannot reasonably create and manage their own apprenticeship programs.

These issues can be overcome through use of intermediary-sponsored apprenticeship programs whose standards are flexible enough to accommodate hiring across a range of different specific technologies, and can be used by a firm to bring on only a single apprentice, if that's the scale it can accommodate. LaunchCode's apprenticeship is flexible enough to allow for hiring of developers in well-known competencies like Java, C#, JavaScript or more niche technologies such as Pega, Cobol or ServiceNow. Flexibility allows employers to use the apprenticeship across the range of scale and nature of need.

Integration

Among the most important considerations employers entertain when contemplating use of LaunchCode's apprenticeship program to hire junior tech talent is the ease with which the program can be integrated with the typical hiring process. That calculus often hinges on whether use of apprenticeship will require the employer to create new infrastructure or processes.

Employers are more likely to see apprenticeship as a viable option if it is designed in a manner that meshes with existing hiring and onboarding practices. Can the apprentice be onboarded in largely the same way a typical employee is onboarded? Does the program require drastically different employee review and assessment for apprentices than is typical for employees? Do apprentice wage, benefit and employment status match the employer's existing expectations and processes for how similarly



situated employees are treated? If the employer can answer ‘yes’ to these questions, the likelihood of their adoption of apprenticeship is substantially greater.

Competency-based

The traditional model of apprenticeship, with its focus on time in program as a key component of completion, can pose a barrier to widespread adoption of apprenticeship. This is particularly true in the field of technology, in which many prospective apprentices come to the process with a substantial existing level of related skill and technical readiness. Under the most common apprenticeship standards, these existing skills are not taken into account at all in determining the length of time which an apprentice must spend in program. The apprentice with existing skill doesn’t get “credit” for previously developed skill and competencies.

But under competency-based apprenticeship models like LaunchCode’s, competency -- not time in the program -- is the primary determinant of progress and readiness for journeyman status. In LaunchCode’s model, an in-depth assessment of existing skill at the outset can demonstrate that the applicant already has a level of technical skill that essentially eliminates the need for classroom-based, related technical instruction. This allows those with the requisite level of skill to skip immediately to a full-time on-the-job experience. The hosting employer is then left to judge when the apprenticeship is successfully completed, based on assessment of competencies defined by the apprenticeship standards.

Accelerated

As much as any field, employment in technology is subject to rapidly changing conditions. Technologies emerge, evolve, fall out of favor, and disappear from use regularly, sometimes in a very rapid cycle. This means that programs intended to provide job readiness in technology are effective to the degree that they can move people through to competency on an accelerated basis and effectively stay ahead of changes in the industry. An apprentice starting a two-year apprenticeship in software development risks seeing much of what she’s learned become obsolete by the time she is fully ensconced in the job.

LaunchCode’s apprenticeship is designed so that most apprentices see their on-the-job experience last 90 to 120 days. Those that require pre-apprenticeship skilling from LaunchCode complete those programs in 14 to 20 weeks. In almost every instance, a LaunchCode participant’s experience will last between 3 months and 12 months, depending on aptitude at the point of entry. This timeline allows people to use apprenticeship to pivot relatively quickly into a high-growth career, and lets employers to use apprenticeship to fill hiring needs on a more expedited basis than is the case through most other pathways.

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