Making Digital Skill Building Work for Businesses

No matter the industry, utilizing technology is a requirement of jobs today. And in most cases it’s not just foundational digital literacy that’s needed, which is the baseline digital skillset that workers need to have regardless of industry, but also occupational digital literacy, which entails developing specific technology-related skills needed for a particular occupation or industry. Whether employees have these skills or not is a test of their digital literacy. Unfortunately for our businesses, workers, and economy, the digital literacy needed by industry is far outpacing the digital literacy of our workforce.

Across all industries, data show that nearly one-third (thirty-one percent) of U.S. workers lack digital skills. At the same time approximately forty percent of these same workers are employed in jobs that require moderate or complex computer usage. Not surprisingly, this leaves workers spending considerable time and energy covering or compensating for their digital literacy skill gaps — serving as an invisible drag on productivity for both workers and the businesses that employ them. Even more concerning, workers with digital skill gaps are more likely to be employed by small businesses, which have less resources and capacity to independently close the gap for their workers — and have been the hardest hit by the COVID-19 recession.

Businesses need workers who have a broad, flexible base of digital skills

The largest barrier employers face with digital literacy is finding workers who are comfortable with a broad range of digital technologies. The ability to confidently download, install, navigate, and use novel software programs or mobile apps is highly valued across industries ranging from construction to logistics to healthcare. The landscape of in-demand software and mobile apps changes so quickly that it’s
just not realistic to imagine that workers can be trained for every individual tool they may encounter on the job.

Instead, business leaders have found that investments in occupational digital literacy have the greatest value when focused on opportunities for workers to build industry-specific but transferrable skills, instead of a single proprietary online system.

**We know what works: demand-driven, contextual, and integrated is key**

Business leaders have also learned that the effective and efficient training models that work for occupational skills in general also work well for occupational digital literacy. Successful digital skill-building models should be contextualized or integrated with relevant technical training. This ensures that the skills workers are learning are directly connected to the demands of today’s workplace.

**Contextualized** models teach technical skills by using the real-world materials and context in which the worker is likely to use them. For example, a class might help construction workers practice using a blueprint technology application that is widely used by general contractors. **Integrated** models take this one step further by combining instruction in foundational skills (literacy, numeracy, spoken English, or digital skills) with simultaneous training for a specific occupation or industry. For example, a class might help workers learn digital skills as part of training as a telehealth coordinator or medical assistant.

Academically, these models work because adults are most motivated to learn when the learning is connected to their daily lives. But, practically speaking, these models work because the materials, tools, and situations that are experienced in training are the same ones experienced in the workplace. This gives both workers and businesses the confidence that occupational digital literacy training programs are aligned to their specific talent needs.

**Lack of public investment is exacerbating the challenges faced by small businesses**

There are successful examples throughout the country of how businesses can facilitate demand-driven occupational digital literacy training. However, most of those that are leading the way in occupational digital literacy are large firms. For example, Cleveland based KeyBank (Key) has implemented a Future-Ready Workforce initiative that reaches 4,000 employees. Global accounting giant Pricewaterhouse Coopers (PwC) has made substantial investments in worker upskilling through its $3 billion New World, New Skills program. The company provides opportunities for its 276,000 workers to earn digital badges.

In contrast to these large firms, smaller companies are often left scrambling to assemble the training partners and resources they need to ensure a steady supply of workers with the necessary skills. While large companies can afford to launch elaborate in-house training programs, small and mid-sized businesses often rely on partnerships with community colleges and other training providers to create their talent pipelines. So even while successful industry-led digital skill building models exists, replication is out of reach for most American companies.

**Our nation’s outdated skills investment portfolio needs modernizing**

Small and mid-sized businesses already face plenty of challenge in scaling up occupational digital skills on their own, and unfortunately the lack of public investment dedicated to digital skill building creates yet another roadblock. For example, the $3 billion federal Workforce Innovation and Opportunity Act — our nation’s preeminent workforce legislation — only briefly mentions digital literacy as an “allowable activity” within adult education programs, and does
virtually nothing to encourage the incorporation of digital skill building as part of occupational training programs. Meanwhile, the Higher Education Act provides a robust $30 billion in Pell Grant assistance each year, but that funding cannot be used for high quality shorter-term programs, which leaves out many technology-focused programs.

An additional challenge for occupational digital literacy is that while digital skills often lend themselves well to a competency-based model, most public investment in postsecondary education and workforce development is focused on the more traditional time-based model.

The primary concern for businesses and workers alike regarding learning models is less about how digital literacy is taught and measured, and more about how it can be shown to have value in the workplace. Competency-based credentials, though much newer on the scene, can certainly have value in the labor market if rigorously designed.

**An overwhelming majority of voters (86 percent) support making it easier for the government and businesses to work together to upgrade all workers’ basic digital skills**

Scale can be achieved, but it comes through partnership

Given that smaller firms are hardest hit by digital literacy skill gaps and are also the least equipped to independently upskill their workforce, what’s the solution? Though there isn’t a silver bullet, sector partnerships are playing an integral role in taking digital skilling to scale. Sector partnerships convene multiple employers within a single industry — along with education, workforce, labor, and community-based organizations — to identify shared talent needs and then upskill workers into those occupations. This time-tested model is often used to take to scale other types of workforce development. But, more recently it has been successfully used to meet industry demand for occupational digital literacy skills.

Sector partnerships allow small and mid-sized businesses to aggregate their digital skill needs so that community colleges, the public workforce system, community based organizations, and other training providers can create industry-wide solutions. They help to reduce speculative guessing about skill demand and instead ensure that workers are developing the digital skills and earning the credentials that local businesses in their community are seeking to hire. Sector partnerships help to even the playing field between firms of all sizes when it comes to upgrading digital skill literacy for both new and existing workforce.

**Lack of broadband makes it difficult or impossible for workers to participate in video- or data-heavy online training. And it also jeopardizes efforts by business to use cost saving technology on the job.**

Broadband infrastructure matters, but it’s just part of the equation

A lack of broadband internet access is a major barrier preventing digital skill building. Issues with broadband access and affordability problems have significant economic consequences for businesses and workers. Lack of broadband makes it difficult or impossible for workers to participate in video- or data-heavy online training. And it also jeopardizes efforts by business to use cost saving technology on the job.

To date, federal broadband internet legislation has not yet achieved the scale and scope of investment necessary to address these concerns. Perhaps even more importantly, it has focused primarily on access, without investing sufficiently in digital devices and digital skill building. To ensure business vitality and address workers’ needs, policymakers should advance holistic policies that invest appropriately in all aspects of digital inclusion.

Nearly 50 million U.S. workers will need new digital literacy skills if they are going to be able to effectively work with new workplace technologies.
**Policymaker Recommendations:**

Policymakers should take immediate action to increase resources and improve support for proven methods that help workers develop the digital skills that industry — and our 21st century economy — demands.

**Modernize our nation’s education and training investments**

- Invest in high-quality professional development and technical assistance to aid workforce and education providers in designing the digital skill building programs that industry demands. Policymakers should invest in the infrastructure needed to deliver digital skills training in the way that is most effective for businesses and efficient for workers: informed by industry and contextualized to occupational skills — not through stand-alone training.

- Update federal student financial aid to recognize the reality of how digital skills are acquired, which is often through short-term training programs. Today’s financial aid policies do not match the realities of today’s students, particularly working adults. Policymakers should also explore ways to increase financial aid for competency-based programs.

**Ensure that small and mid-sized businesses don’t get left behind**

- Invest in sector partnerships that can collaborate with community colleges, and other training and supportive service providers, to ensure firms of all sizes have the tools and capacity they need to deliver demand-driven occupational digital literacy skills to their workforce.

**Expand investments to tackle all three “legs of the stool” of digital access — broadband internet access, digital device access, and digital skills.**

- By investing simultaneously in these interrelated components, policymakers can ensure that potential progress on occupational digital literacy is not hampered by a lack of equipment or broadband access.

**Endnotes**
