

Need to Act Now





Examining the Skills Gap

Skills Gap Overview

Failure to close the skills gap and adapt the supply of skills to meet the needs of the new technological era could cost the US economy as much as \$975 billion over the next 10 years, and G20 countries up to \$11.5 trillion in GDP growth in the same time frame.¹

The growing skills gap is a challenge that directly impacts everyone—individuals in the workforce, prospective and current employers, and academic/training partners. Based on these projections, failure to find a resolution to the skills challenge will result in sweeping repercussions for our global economy and presents a threat to business sustainability around the world.

So what is this skills gap? How did it originate?

The skills gap is defined by the growing mismatch between the evolving needs of employers and the skills possessed by the available workforce. Although the number of people unemployed in the US is approaching seven million and there are millions more who are underemployed or who have opted out of the workforce, the US labor shortage has,

ironically, reached a critical point. As of the summer of 2018, there were a record **6.7 million US job postings**, with employers from trucking companies to Silicon Valley tech firms struggling to find qualified workers and overcome the skills imbalance.

"Business' number one problem is finding qualified workers. At the current pace of job growth, if sustained, this problem is set to get much worse. These labor shortages will only intensify across all industries and company sizes."

- Mark Zandi, chief economist at Moody's Analytics²

Some refer to the skills gap as a compensation gap, saying that employers are simply unwilling to "pay to play" and bump up wages to attract the right talent. Others call it a training gap, claiming that employers aren't doing enough on-the-job training, or that educational institutions aren't in tune with employers' needs. Regardless of the root causes, 40% of US employers today say they cannot find people with the skills they need, and 60% of employers also complain of lack of preparation—even for entry-level jobs.

¹ https://www.accenture.com/ca-en/insights/future-workforce/transforming-learning

² https://www.cnbc.com/2018/07/05/private-payrolls-grow-by-177k-in-june-vs-190k-estimate.html

Where Does the Blame Lie?

Academia?

- 75% of Americans say schools are failing to provide an adequate 21st-century education.
- 90% of Americans believe that high schools and colleges need to do more to develop employable graduates.

Students and Employees?

- 70% of Americans say failure to study in-demand STEM subject matter is a factor responsible for the skills gap.
- 92% of Americans believe employees should be continually updating their skills.

Employers?

- 60% of adults cite employer-driven failures (failure to provide training, lack of apprenticeship programs, not communicating expectations to employees, having unrealistic expectations of job candidate skills) as being responsible for the skills gap.
- 92% of Americans say that employers should do more to train workers in skills the employers require.

Government?

- Greater than 50% of adults in the US point to a failure of federal, state, and local governments to offer enough training programs.
- 75% of adults say the government should provide more incentives to businesses to offer training.³

Fact: The average cost HR managers say they incur for having extended job vacancies is more than \$800,000 annually.⁴

Let's take a closer look at the skills gap and examine some of the key issues at play and what employers can do about it.

- 3 https://americanstaffing.net/asa-workforce-monitor/the-skills-gap-whos-to-blame/
- 4 https://www.slideshare.net/cbforemployers/careerbuilders-empower-2017





Key Issues

The Imbalance: Why Today's Supply Is Falling Short of Demand

By 2030, the global talent shortage could reach 85.2 million people.⁵ Knowledge-intensive industries, such as financial services, business services, technology, and telecommunications, will be among the hardest hit, as they require a large volume of skilled workers. Companies in these sectors are often early adopters of disruptive and digital technologies—rolling them out broadly across their organizations—that demand skill sets/expertise in continuously evolving areas such as data science, data analytics, and user experience design. Within the financial services and business services sectors alone, the talent deficit is projected to reach almost three million workers globally within the next two years.⁶

To make up this shortfall, as many as 375 million workers around the world will have to master fresh skills to remain relevant as the jobs they are doing today evolve in tandem with the increased use of automation and intelligent machines, estimates the McKinsey Global Institute.

EXPECT TO SEE:

- New reskilling programs: 75% of executives believe reskilling and upskilling will fill at least half of their future talent needs.
- Corporations take the lead: 66% of executives view addressing the potential skills gap as a top ten priority.
- More and more automation and digitization: <u>Technology</u> disruption is expected to affect more than one-quarter of workers in companies with \$500 million in revenue or more.
- The educational system rises to the challenge: The graduates of current teaching methodologies and classrooms are falling short of employer requirements. The educational system from K-12 to post-secondary needs to quickly evolve in order to equip students with the skills required for future work.
- More academic/enterprise partnerships: While these
 partnerships have existed in the past, expect to see more
 in the future as businesses focus on a) building a direct pipeline
 from the classroom to the enterprise, and b) leveraging academic
 expertise and content to reskill existing workers.

Fact: Two-thirds of US executives say they prefer job candidates with science and analytical skills, but only 23% of educators believe their graduates possess those skills.⁷

⁵ https://business.linkedin.com/talent-solutions/blog/trends-and-research/2018/industries-biggest-talent-shortages-2030

⁶ Ibid

⁷ http://www.ethicalcorp.com/pwc-programme-targets-us-skills

Skills of the Future: A Journey into the Unknown

The world of work is changing. Over the next two decades, we can expect to see new careers, new sources of demand, new skills, and new retraining/education programs emerge as we attempt to address the skills gap. At the same time, many "traditional" jobs will be retired, replaced through automation and intelligent machines. The World Economic Forum predicts that, between 2015 and 2020, over five million jobs could be lost as artificial intelligence, robotics, nanotechnology, and other socioeconomic factors decrease the need for human workers. However, as "doom and gloom" as this prediction seems, all is not lost. While more manual/clerical roles may indeed be automated, another 2.1 million new jobs will be created through technological advancement.

While we can try to prepare for a new, technologically dominated world by putting greater emphasis on science, technology, engineering, and math skills in our educational systems, we cannot possibly predict with any clarity the roles and skill sets that will be required by employers over the next quarter century. What employers and educational partners can do, however, is up their investment in soft skills development and training to provide the necessary "connective tissue" to bridge the gap between the skills and roles of today and those that may evolve in the future by enabling employees to better communicate, share their knowledge, and adapt to reskilling.

Fact: 57% of senior leaders say soft skills are more important than hard skills.⁸

 $8 \quad https://learning.linkedin.com/blog/top-skills/the-skills-companies-need-most-in-2019--and-how-to-learn-them \\$

The top 5 soft skills companies need most in 2019

Based on research from LinkedIn Learning



Source: LinkedIn

EXPECT TO SEE:

- · Greater investments in workplace learning
- · More employer-funded tuition and college achievement programs
- Employers tapping into the power of peer networks to democratize learning
- Greater emphasis on content curation and social learning
- Increased emphasis on skills assessment and organizational skills mapping
- · Improved alignment of workforce strategy and business strategy

Taking Action: How Are Enterprises Moving the Needle?

Failure to close the skills gap has resulted in stalled growth, a stressed workforce, and a lack of innovation. Employers are now exploring multiple options to fill the widening talent pipeline, from forging new and creative partnerships with academia to bypassing colleges and universities altogether. In fact, a recent survey of 600 HR leaders representing small businesses with fewer than 1,000 employees found that 90% have dropped the requirement for a four-year degree and are more open to hiring a candidate with a recognized certification (66%), an online degree from a MOOC (47%), or a digital badge (24%).

Here are just some of the ways employers are working to move the needle and resolve the skills challenge.

EXPECT TO SEE:

New Modes of Learning

Employers are becoming increasingly receptive to new forms of learning and to job seekers with nontraditional credentials (something other than a four-year degree). Large enterprises such as Oracle, PwC, and EY are offering digital badge programs or paying workers to attend boot camps, while others such as Google are turning to peer mentorship and tapping into modern online learning platforms.

Use of Artificial Intelligence (AI)

40% of employers believe artificial intelligence will help fill the skills gap by making hiring more efficient, eliminating unconscious bias, and automating routine tasks. Machines can also work longer hours than humans and don't require benefits or compensation. In fact, a recent Deloitte study found AI could free federal employees from as many as 1.1 billion working hours (30% of federal employees' working time) in the next five to seven years, saving up to \$37 billion annually, while liberating employees for other tasks. But implementing AI in a correct and unthreatening way is key.

"We're going to see more collaboration between educators, between companies, and between the government to step in and provide training options to reskill and upskill individuals, for those whose jobs are going to either be eliminated or enhanced by AI," says Jeremy Walsh, senior vice president of learning solutions at Learning House.¹⁰

However, employers' desire to implement AI is, in fact, contributing to the skills gap. There are approximately 300,000 AI professionals worldwide today, and yet there are millions of AI-related roles available.

⁹ https://www.td.org/insights/how-companies-can-close-their-skills-gap

¹⁰ https://www.clomedia.com/2018/07/03/will-ai-help-close-the-skills-gap/

Innovative Programming

While employers report they cannot find the skilled workers they need and that job seekers and graduates are falling short of expectations, the skills gap also represents a significant opportunity for new and innovative partnerships between employers and post-secondary institutions. **Global**think tank McKinsey has conducted extensive research in the field of workforce development and has identified five principles it believes should be the foundation for successful workforce development programs.

- 1. **Define geographic assets and identify target professions:** In short, employers should decide on a region for focus and come together to address the talent problem for an entire sector.
- 2. **Deliver ROI to employers and workers:** Track metrics and tie workforce development programs to business goals/outcomes.
- 3. Support comprehensive demand-driven training programs:

 Effective training engages participants, offers multiple methods of instruction, focuses on areas where on-the-job failure is most likely to occur, puts the emphasis on regular tasks, and incorporates ongoing assessment.
- 4. **Assess and prepare learners prior to training:** Ensure learners are ready with basic levels of certifications or competencies to begin training, then boost engagement through clear expectations and goal setting.
- Centrally coordinate workforce development processes: Tie
 programming into state/federal funding programs and establish
 outcomes and performance management processes tying funding
 to learner employment.



New Academic Partnerships

Business and academic partnerships create value-added opportunities for students, positive brand synergy, and creative options for upskilling/reskilling of workers. Here are some examples of successful partnerships at work:

- FedEx will offer free tuition to its Memphis-based employees to earn an online degree from the University of Memphis. About 11,000 employees at the company's international hub will be eligible for the Learning inspired by FedEx (LiFE) program, according to a release from the university. UofM Global, the university's online arm, has 60 graduate and undergraduate degree programs. The partnership will also allow employees who lack a high school diploma to earn a high school-equivalent degree.¹¹
- Engineers at heavy equipment maker Caterpillar in Tucson will learn the basics of machining and welding through Pima Community College. The Applied Technology Academy will give degreed engineers hands-on experience with fabrication. In time, Pima also plans to open the courses to the general public, allowing other companies with similar training needs to join Caterpillar employees in the program.¹²
- Papa John's has introduced a new tuition benefit program for its 20,000 corporate team members that is unique in the Quick Service Restaurant industry. The tuition reimbursement education program, called Dough & Degrees, is offered in partnership with Purdue University Global. The program covers 100% of tuition costs of undergraduate and graduate online degree programs for Papa John's corporate team members. The new program allows eligible employees to expand their skill set, build leadership and management expertise, and prepare to advance their careers by selecting an online degree program that matches their career goals. Papa John's team members can enroll in any of Purdue Global's online associate, bachelor's, and master's degree programs, including business, information technology, cybersecurity, accounting, and finance.¹³

Fact: Estimated spending on workforce development programs in the US is at least \$300 billion per year.¹⁴

¹¹ https://www.commercialappeal.com/story/news/education/2018/08/18/fedex-free-tuition-university-memphis/1019446002/

¹² https://tucson.com/business/caterpillar-partners-with-pcc-to-train-engineers-on-hands-on/article_6b3accb5-a083-5df1-8cd9-87cd5cb962c2.html

 $^{13 \}quad https://ir.papajohns.com/news-releases/news-release-details/papa-johns-and-purdue-university-global-partner-deliver-first$

¹⁴ https://www.mckinsey.com/industries/social-sector/our-insights/closing-the-skills-gap-creating-workforce-development-programs-that-work-for-everyone

Lost in Translation:

Why Academia and Employers Need to Find Common Ground

The skills gap presents an interesting conundrum for the job seeker. On the one hand, finding work without a college or university degree remains challenging. Twenty-two percent of young adults with just a high school diploma live in poverty today, compared with 7% in 1979. And yet, employers are clearly indicating that even with a post-secondary education, today's graduates do not have the skills required for many entry-level positions. Survey data shows that students do not fully understand how employers value skills, overvaluing skills like leadership while undervaluing flexibility, teamwork, and conflict resolution that employers highly value.

Academic/employer partnerships have existed for decades. But is the formula working? Experts use the example of advisory boards, a long-held program model where industry experts provide input into post-secondary curriculum. Those involved say that advisory board engagement tends to be superficial and ineffective. What is required is a deeper level of collaboration in the creation of course content, and a movement away from grades as a measure of success toward a competency or proficiency model, where a student's professionally acquired expertise is acknowledged, and the pathway to certification or degree can be significantly shortened.



¹⁵ https://www.luminafoundation.org/files/resources/beyond-the-skills-gap.pdf

¹⁶ https://www.insidehighered.com/news/2018/08/28/survey-business-leaders-believe-students-are-learning-skills-not-those-needed

Inhibitors/Success Factors When Seeking to Partner:

- 1. **Commitment:** Both parties need to commit time, finances, staff, and equipment, and they need to be on the same page in terms of what those resources mean (i.e., time frame expectations may be quite different).
- 2. **Structure:** The bureaucracy, complex structure, and inflexibility of an academic institution can often be at odds with the flatter organizational structure of an industry partner. To overcome structural challenges, partners must have clarity around roles and responsibilities, mutual terminology, and project management to keep communication and collaboration flowing.
- 3. **Willingness to change:** Both partners need to invest the time and be open to listening to understand their respective positions, find effective ways to collaborate, and accept feedback.
- 4. **Strong personal relationships:** Communication and relationships need to be forged at management and operational levels with continuous communication, regular interactions, feedback, and mutual exchange of information.

- 5. **Trust:** Partners need to invest appropriate time in building mutual trust and maintaining that trust over time through similar operating and decision-making styles, excellent reciprocal communication flow, and the appropriate contractual safeguards.
- Culture: Partners have a mutual understanding about the way
 members perceive and feel about problems and challenges and
 overcome discrepancies by establishing common language early
 in a project.
- 7. **Goals compatibility:** Ensure there is alignment on vision, goals, objectives, and outcomes, and that each partner has realistic expectations with regards to the partnership.

Take the Next Step

Are you looking to better understand how the skills gap is impacting your organization? Learn how D2L can help. Start building your action plan by reading our eGuide, "Creating a Stronger Skills Connection", trying Brightspace free for 30 days, or contacting our sales team to talk.

About D2L

D2L is the creator of Brightspace, a learning platform for organizations who value learner success as a driver of business success. We believe a great learning experience is critical to driving engagement and retention. D2L's learning platform helps prepare and engage your workforce with a personalized learning experience, leadership development, peer-to-peer knowledge sharing, and more. With a fully open API, Brightspace can easily integrate within your existing technology ecosystem. For many companies, engaging their workforce has become just as necessary as engaging their customers. With the right tools, we can help you turn the challenge of retaining and developing the best talent into a competitive advantage.

Contact Us

Phone: 1-519-772-0325 (Worldwide)

Toll Free: 1-888-772-0325 (North America)

+44-203-695-8580 (United Kingdom and Europe)

0-800-452-069 (New Zealand)

1-800-778-631 (Australia) 0-800-891-4507 (Brazil)

Fax: 1-519-772-0324

Email: ContactUs@D2L.com
Facebook: facebook.com/D2LInc

Twitter: @D2L

Web: www.D2L.com

© 2019 D2L Corporation. All D2L marks are trademarks of D2L Corporation. Please visit D2L.com/trademarks for a list of D2L marks. The D2L family of companies includes D2L Corporation, D2L Ltd, D2L Australia Pty Ltd, D2L Europe Ltd, D2L Asia Pte Ltd, and D2L Brasil Soluções de Tecnologia para Educação Ltda.

