



D2L | WAVE

Overcoming the New Skills Gap Challenge

**How to navigate post-pandemic
skill and talent shortages**

Examining the Skills Gap

Skills gap overview

The skills gap is defined as a mismatch between the evolving needs of employers and the skills possessed by the available workforce. It's been a top-of-mind concern over the past few years, but growing skill shortages combined with disruptions caused by the COVID-19 pandemic are accelerating the needs for people with specific skillsets at an unprecedented rate.

Employers are now reporting that 94% of their workforce requires new skills for the company to remain competitive in today's landscape.¹ If employers fail to act, there could be sweeping repercussions for our global economy, introducing a threat to business sustainability around the world.

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. But offering higher wages won't necessarily affect the supply of workers with needed skills, and businesses cannot always rely on educational institutions to supply new graduates with the needed skills. This is where upskilling and reskilling become an important strategy for businesses.

Upskilling vs. Reskilling

While both terms refer to existing workers gaining new skills, there is a pivotal difference between the two strategies.

Upskilling is the process of workers learning new skills to be more effective in their current career path, whether through internal training or external education.

Reskilling is the process of learning new skills so workers can perform an entirely different job.

The breadth and depth of learning workers require will depend heavily on two factors: the education and skill levels the workforce already has and how drastic the disparity is between current and required skills.

Who Will Solve the Skills Gap Challenge?



Academia

- **Why they're important:** Institutions have the experience and expertise in learning development, with the ability to put content together and teach students.
- **What they're doing about it:** Institutions are working closely with businesses, extending beyond four-year degree programs and designing education geared to the workforce, such as microcredentials, certificates, and digital badges.



Employers

- **Why they're important:** Employers are the drivers of skills development. Their commitment to continuous development and investment in the workforce is critical for growth.
- **What they're doing about it:** Companies are focused on determining how they can remain competitive in changing environments. They recognize the value of their workforce and are committed to investing in employees.



Employees

- **Why they're important:** Employees are the backbone of every organization. Without the workforce and their commitment to growth, companies could not progress.
- **What they're doing about it:** Employees are recognizing the need to continuously build skills in order to advance their careers. They're motivated and excited about making an impact in their fields.



Government

- **Why they're important:** The skills shortage is an economic issue. If companies and employers are not competitive, the economy could be heavily impacted.
- **What they're doing about it:** The government is approving the design of grants and training credits to incentivize education providers, employers, and employees to continue developing and investing in workforce skills.

Key Issues

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

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

By 2030, the global talent shortage could reach 85.2 million people.² Digitally heavy industries, such as financial services, business services, technology, and telecommunications, have been working toward upskilling and reskilling for a number of years, 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. The future of work has already arrived for white-collar workers, with 84% of employers set to rapidly digitize processes, including accommodating a significant expansion of remote work.³ The World Economic Forum is estimating that 44% of white-collar workers will continue to be remote as a result of the pandemic.⁴

Traditional white-collar jobs are not the only ones at risk for severe talent shortages. Industries such as manufacturing, oil and gas, and automotive were hit particularly hard as a result of the pandemic. While these industries have acknowledged the skills gap concern for some time, the pandemic has exacerbated the problem through increased layoffs and career changes, and a rapid shift to take on digital technologies.⁵ In fact, a Canadian Manufacturers & Exporters survey has found that 85% of manufacturers are struggling to fill vacancies.⁶

Expect to see

- **New reskilling programs:** Seventy-five percent of executives believe reskilling and upskilling will fill at least half of their future talent needs.⁷
- **Corporations take the lead:** Sixty-six percent of executives view addressing the potential skills gap as a top 10 priority.⁸
- **More automation and digitization:** Technology disruption is expected to affect more than one-quarter of workers in companies with \$500 million in revenue or more.⁹
- **Educational systems rise to the challenge:** The graduates of current teaching methodologies and classrooms are falling short of employer requirements. The educational system, from K-12 to the post-secondary level, needs to quickly evolve in order to equip students with the skills required for future work.
- **More workforce education:** As corporations aim to deploy upskilling strategies, they will be deploying a mix of internally created training programs paired with strategic education offered by external learning partners.

Skills of the Future: A Journey into the Unknown

Over the next two decades, we can expect to see new careers, new sources of demand, new skills, and new retraining and education programs emerge as we work to address the skills gap. The World Economic Forum predicts that the pace of technology adoption we're seeing right now is expected to continue and may even accelerate in some areas.¹⁰ Areas such as cloud computing, big data, and e-commerce will remain a high priority for businesses, but the pandemic has caused a significant rise in the need for encryption, non-humanoid robots, and artificial intelligence (AI). At the same time, many “traditional” jobs will be retired, replaced through automation and intelligent machines. By 2025, the time spent on tasks at work by humans and machines will be equal.¹¹

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. When gearing up for mass digital transformation, many believe that it's the technical skills that are the most important, but what employers may actually need most are soft or durable skills—critical thinking, analysis, and problem solving.

Expect to see

- Greater investments in workplace learning
- More employer-funded tuition and college achievement programs
- Employers streamlining professional development for learning equality across the organization
- Greater emphasis on content curation and relevant skills development
- Increased emphasis on skills assessment and organizational skills mapping
- Improved alignment of workforce strategy and business strategy

**Taking
Action****How Are Organizations
Moving the Needle?**

Failure to close the skills gap has resulted in stalled growth, a stressed workforce, and a lack of innovation.¹² 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. The competitiveness for top-tier talent has been further exacerbated by the pandemic, requiring companies to rethink their education requirements. In many cases, corporations are finding it easier to hire a candidate with the right soft skills, even if the people being hired don't have the technical training for the job at hand. Finding a new hire and then providing him or her with in-the-flow-of-work training and education has been a successful strategy for filling position vacancies. But without an upskilling or reskilling strategy in place, agile hiring processes are simply not possible.¹³

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





Taking Action

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.¹⁴ Focusing on education delivered in the flow of work and at the time of need is the backbone of any upskilling strategy. Should employees require a new skill in order to complete their work, having fast access to training or education is essential.



It's just as important for businesses to have a process in place for after the upskilling as it is for before. Once an employee has received new training, businesses need to find a way to document and record the education and training that each employee receives. Without it, you will not have accurate and measurable skills mapping throughout your organization.



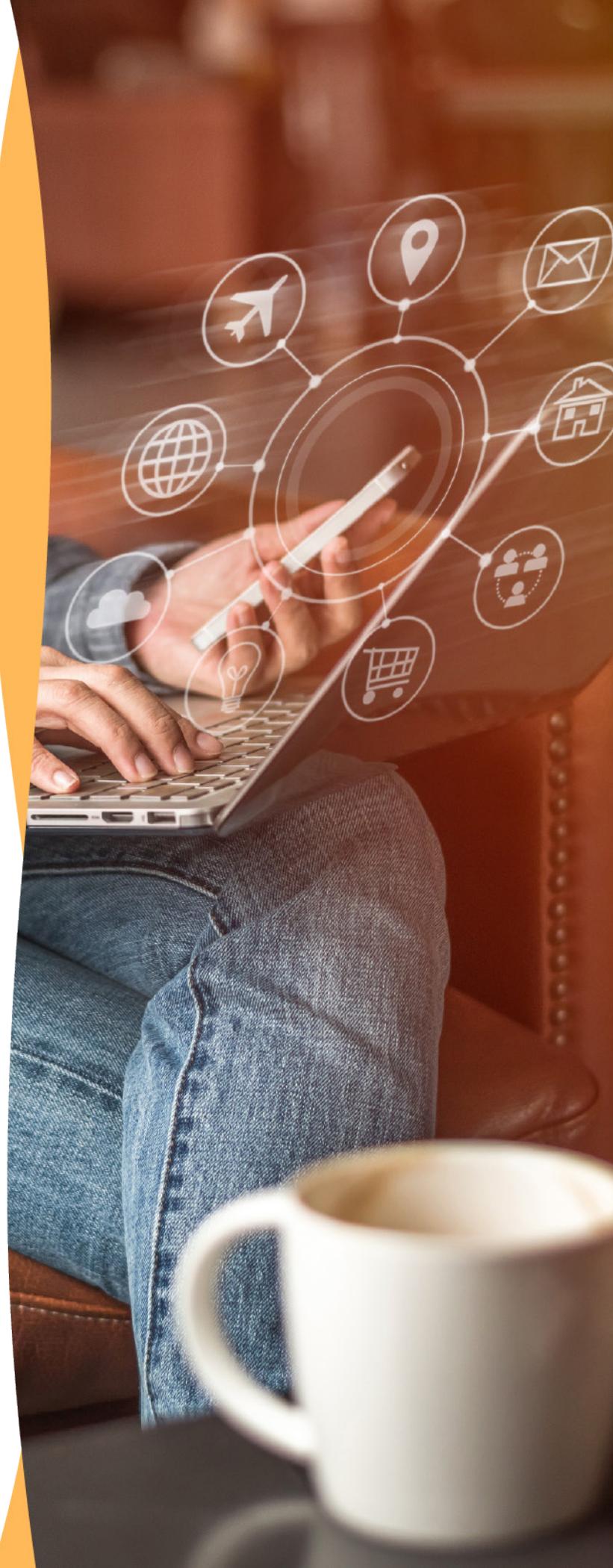
**Taking
Action**

SKILL-ALIGNED CORPORATE STRATEGIES

Many companies are developing automated systems in order to become more efficient and remain competitive in a global marketplace. In fact, 40% of employers believe automation and machine learning will help fill the skills gap. In fact, a 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 and allowing employees to put their focus toward more strategic tasks.¹⁵

At the same time, this shift toward automation is also contributing to the skills gap. There are approximately 300,000 AI professionals worldwide today, and yet the Tencent Research Institute speculates that the market has demand for millions of AI-related roles.¹⁶

This is why employers are putting an emphasis on aligning organization-wide learning and development strategies to business strategy. Previously, if a corporation needed a particular skill set to stay competitive, they would look to hire or obtain it from outside of the organization. The skills shortage and competition for talent makes this strategy no longer viable. By using upskilling tools that match education options to specific skills, corporations can quickly develop internal talent rather than having to look externally.





Taking Action

CONSCIOUS SKILLS BUILDING

While employers report they're sometimes challenged to find the skilled workers they need and that some job seekers and graduates can struggle to meet expectations, the skills gap also represents a significant opportunity for businesses to modernize their learning and development programs. In a McKinsey Global Survey on workforce needs, respondents have identified the skills shortage as a priority, but few organizations understood how to go about deploying an upskilling strategy. This survey found that almost 60% of organizations could

easily identify the employees to upskill/reskill and understood what skills they needed to address. However, fewer than half of companies felt confident in their ability to design a training curriculum that would build those skills. With the majority of companies not being able to internally provide the training, almost 75% of companies admitted that their professional development incentive and benefits program was poorly designed.¹⁷ With the vast majority of companies not able to provide the training themselves, searching for external education and training providers is critical.



How Academia Is Rising to the Challenges Employers Are Facing

Continuing education programs are continually evolving to meet the needs of employers and employees. Businesses can rely on the expertise academic institutions bring to the table with course and curriculum design, and the educational offerings are often designed to fit the work-life balance full-time workers need.



Microcredentials

With more governments focusing on providing microcredentialing—including Ontario’s 2020 announcement of a nearly \$60 million microcredential strategy¹⁸—it’s important for employers to understand what a microcredential is.

In the succinct words of Dr. Tony Bates, microcredentials are “shorter, employer-focused credentials that have some validity to the needs of the labor market.”¹⁹ The programs don’t follow semester-based schedules. Instead, they’re tied to assessing specific individual or sets of skills, knowledge, and competencies and can be stackable or standalone.

These high-quality, high-impact programs can be an integral component of effective upskilling and reskilling strategies.



Online Courses

Online courses are just that—courses delivered online, often using a learning management system (LMS) to allow students to access content and course activities in a centralized location without the need to attend in person. These courses can be designed to mimic in-person experiences with some scheduled virtual sessions or can be fully self-paced. Some still allow interaction between employees, peers, and facilitators through features like discussion boards. These online courses allow employees to access learning opportunities that would otherwise have been unavailable because of their location or challenges scheduling school around their work and personal lives.



Online Degrees

Much like online courses, online degrees allow participants to work toward a recognized degree from an accredited education provider without the need to physically travel to a specific location. Many of the available online degrees today have been designed with the adult learner's life in mind—allowing for schedules that are flexible. This can enable adult learners to keep working and managing their family life while still fully participating in the education experience. For organizations looking to support employees in furthering their recognized credentials, online degrees can be a very valuable tool in the education support toolkit.



Programs for Professionals

Depending on the industry, employees may be required to maintain certifications such as PMP (Project Management Professional) or ChFM (Chartered Financial Manager), among many others. These certifications are granted and managed by specific authorities like professional societies or associations, and quite often have renewal requirements that include ongoing education from accredited and/or approved providers. These programs can be quickly adapted to changes in their respective industries, which makes them excellent options for employers to ensure their employees are on the cutting edge of industry-specific knowledge.



Business and Academic Partnerships at Work

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 offers free tuition to its Memphis-based employees who wish to earn an online degree from the University of Memphis. About 11,000 employees at the company's international hub are 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 also allows employees who lack a high school diploma to earn a high school-equivalent degree.²⁰



Engineers at heavy equipment maker Caterpillar in Tucson learn the basics of machining and welding through Pima Community College. The Applied Technology Academy gives 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.²¹

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 the 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.²²



What It Takes to Create Modern A Learning Program



Commitment: Businesses and academia need to be committed to solving the skills challenge. Each party must commit time, finances, and resources to foster lifelong learning journeys for employees and students.



Collaboration: Long-term transformational change will require new skills training to be created quickly and be available in the flow of work, when it's needed most. This requires businesses to understand and articulate their needs, and academic partners need to be able to hear them and respond.



Flexibility: The agility to respond to change is critical. If the pandemic highlighted anything, it's that everyone needs the ability to quickly adapt, both in creating strategic learning opportunities and deploying them to relevant workers.



Measurement: A leading reason why most learning programs are not well developed is the lack of any empirical data on the success of initiatives. Corporations need to have visibility into global skills changes and understand whether they have an emerging gap in their business. Then, they need the ability to measure how impactful their investments have been in helping them gain those skills.



Proactivity: Once corporations know there is a potential or existing skills gap, they need to take proactive measures to eliminate it. The need for new skills is not going away, and the problem will just compound over time if it's not addressed.

Take the Next Steps

Are you looking to take meaningful steps toward solving a skills gap or talent shortage at your organization? D2L Wave is an upskilling education solution that simplifies professional development for organizations. The platform is free—you pay only for the courses your employees take.

See how easy it is to connect employees to education options that support business strategy.

Get started today.

Endnotes

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About D2L

D2L is the software leader that makes learning experiences better. The company's cloud-based platform is easy to use, flexible, and smart. With Brightspace, organizations can personalize the experience for every learner to deliver real results. The company is a world leader in learning analytics: Its platform predicts learner performance so that organizations can take action in real time to keep learners on track. Brightspace is used by learners in higher education, schools, and the enterprise sector, including the Fortune 1000. D2L has operations in the United States, Canada, Europe, Australia, Brazil, and Singapore.

About D2L Wave

D2L Wave is an upskilling education platform for companies that want to amplify their employees' potential by cultivating lifelong learning and future-proofed skills. It connects your workforce with professional development opportunities that align with your company's business strategy.

Learn more about D2L Wave at www.D2L.com/wave.

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