Closing the
SKILLS GAP

2019

WILEY

EDUCATION SERVICES

futureworkplace

CLOSING THE SKILLS GAP 2019

A joint project of Wiley Education Services and Future Workplace

A number of individuals contributed to the project.

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Executive Summary

Businesses continue to struggle to hire the talent they need for open roles. In fact, the greatest challenge that finance leaders face is to find candidates with the right skills.[1] Many factors contribute to skills gaps, including the pace of technological change and a tight job market that restricts a company's ability to attract new talent.[2] Considering these talent acquisition hurdles, it's no wonder a growing number of employers believe their company is experiencing a skills gap.

In the spring of 2019, Wiley Education Services and Future Workplace surveyed 600 human resource leaders about their hiring practices, barriers to identifying qualified candidates, and challenges that limit talent development programs. Building on 2018 benchmarks from a study conducted by Learning House (now a part of Wiley Education Services) and Future Workplace, the 2019 study found that 64% of surveyed employers believe there is a skills gap in their company, up from 52% in 2018. These gaps cause recruiting challenges for 43% of surveyed employers and make 42% of companies less efficient.

How Employers View the Scope and Impact of Workforce Skills Gaps

Believe Their Organization Has a Skills Gap

64%

Believe Skills Gaps Cause Recruiting Challenges

43%

Believe Skills Gaps Make Companies Less Efficient

42%

Upskilling is one way for companies to close their skills gap, and 68% of surveyed employers promote its value to their employees. That said, less than half invest more than $500 per year to upskill each employee. While employers could build talent via training instead of attempting to buy it through hiring, barriers often impede the delivery of learning and development programs. This study found that HR leaders lack the funds (40%) or in-house resources (35%) to upskill their personnel, and another 35% encounter challenges when seeking third-party training partners.

> **Although 68% of employers often or always communicate the value of upskilling, only 48% invest more than $500 annually to upskill each employee.**

Fortunately, there are opportunities for business leaders and educators to collaborate to find long-term solutions to the skills gap. A goal of this study is to initiate a dialogue that bridges the communication gap between employers and educators. By working together, these groups can ensure students develop competencies to close workforce skills gaps and strengthen the nation's economy.

Glossary of Survey Terms

The survey included the following definitions to help respondents interpret terminology in similar ways.

Skills gap: *A significant gap between an organization's skill needs and the current capabilities of its workforce.*

Upskilling: *The process of learning new skills or of teaching workers new skills at their current job.*

Reskilling: *The process of learning new skills so you can do a different job, or of training people to do a different job.*

Artificial intelligence (AI): *The ability of algorithms to process data and apply human-like intelligence to make decisions.*
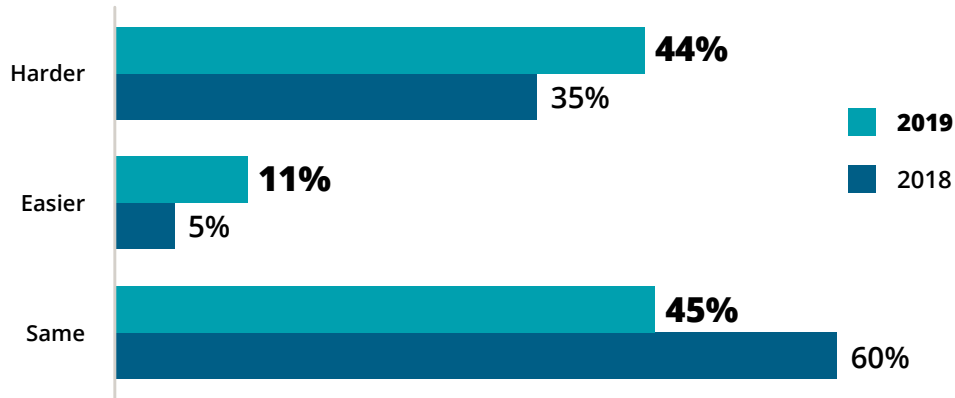
Section 1:
The Skills Gap Is Widening

ESCALATING STAFFING CHALLENGES

A significant share of employers view skills as short-term assets, as 40% estimate that a skill is usable for four years or less. Fast-paced obsolescence escalates the need for employers to hire or upskill workers when gaps form. Not every business can adapt fast enough, so skills gaps rapidly widen.

Unfortunately, it is difficult for companies to satisfy their skills needs through hiring alone. According to this survey, 44% of employers believe it is harder to fill open positions this year than last year. In 2018, only 35% of employers shared this view. This may be a reason 64% of employers say their organization has a skills gap, an increase of 12 percentage points since 2018. The three biggest impacts of skills gaps include recruiting challenges (43%), decreased efficiency (42%), and missed opportunities (27%).
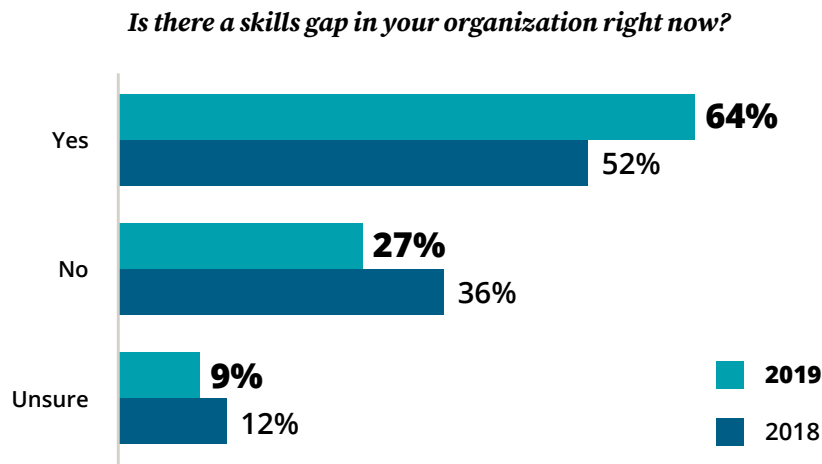
Is there a skills gap in your organization right now?

	2019	2018
Yes	64%	52%
No	27%	36%
Unsure	9%	12%

Has filling open positions to close your skills gap been harder this year compared to last?

Harder — 2019: **44%**, 2018: 35%

Easier — 2019: **11%**, 2018: 5%

Same — 2019: **45%**, 2018: 60%

Legend: **2019**, 2018

REASONS THE SKILLS GAP IS WIDENING

More than three-fourths of surveyed employers said their organization had up to 500 unfilled roles during the past year. What are the top barriers to filling open positions? At 37%, the biggest barrier is the pace that technology changes, but talent limitations also play a part. For instance, 31% of employers lack skilled talent who can take on more responsibility and 30% cannot find enough qualified candidates.

Top 3 Barriers to Filling Open Positions

Pace of change in technology
37%

Not enough skilled talent capable of moving into positions of greater responsibility
31%

When hiring for certain jobs, there aren't enough qualified candidates in the workforce
30%

HOW RETIREMENT AFFECTS SKILLS GAPS

An aging workforce may contribute to workforce strains. According to this survey, 31% of employers expect their skills gap will widen as baby boomers retire. On the other hand, members of the baby boom generation remain workforce assets, as nearly two-thirds of employers have hired retirees or people who had left the job market.

How will baby boomers retiring impact the skills gap in your organization?
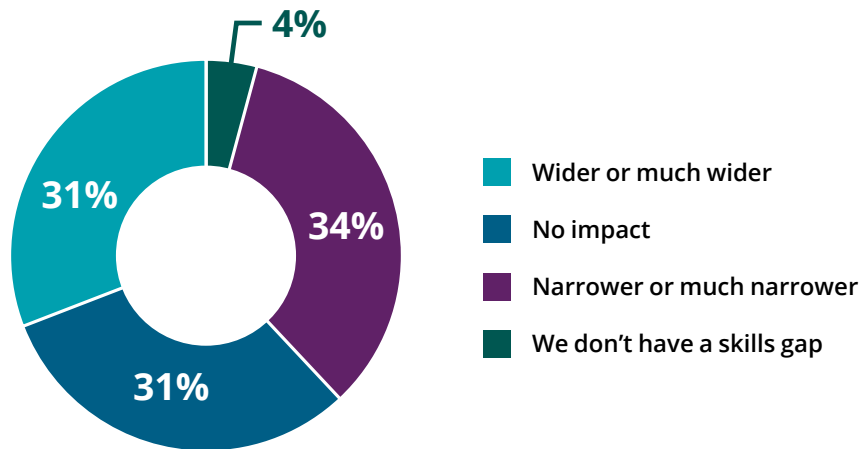
4%

31%

34%

31%

- Wider or much wider
- No impact
- Narrower or much narrower
- We don't have a skills gap

Have you ever hired an individual who was considered retired and not currently employed?

16%

20%

64%

- Yes
- No
- Not sure
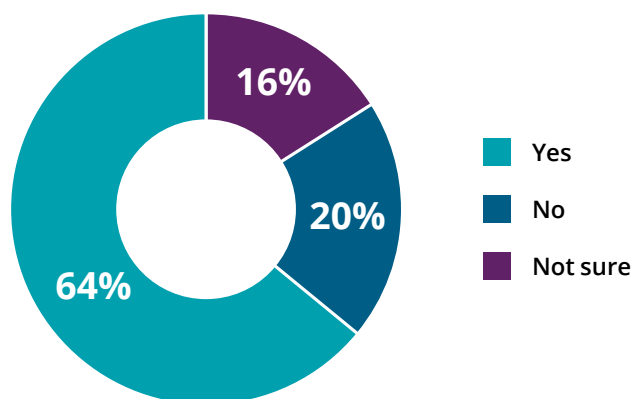
Section 2:
Hiring Practices Designed to Close Skills Gaps

THE ROLE OF CREDENTIALS IN THE HIRING PROCESS

Employers are willing to look beyond college graduates to fill open roles. According to this year's survey, 90% of employers would hire candidates who validate their knowledge using a certification, digital badge, or coursework instead of a college degree. In addition, 55% of employers often offer jobs to people who haven't finished college.
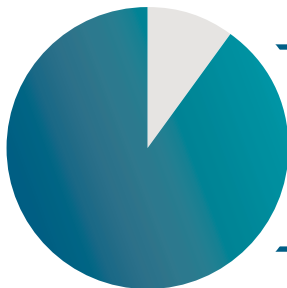
Even so, 68% of employers still rely on college degrees to validate hard skills. Additionally, nearly half trust industry certifications and nearly one-fourth rely on skills bootcamps.

90%
Share of employers who would hire candidates who validate their knowledge using a certification, digital badge, or coursework instead of a college degree.

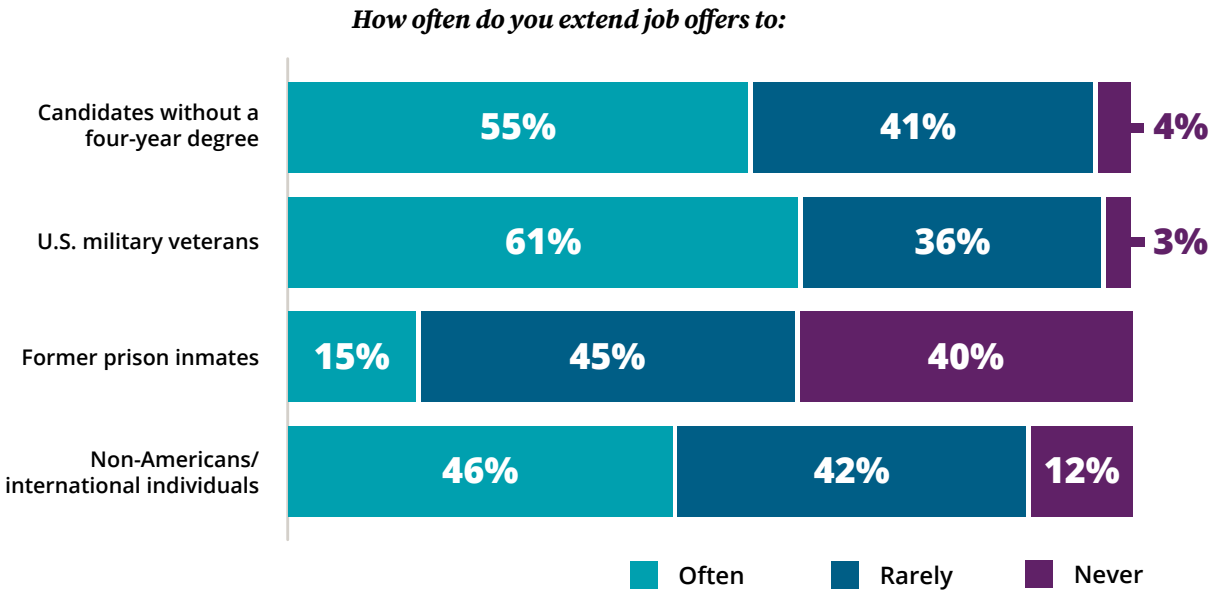| How open are you to hiring a candidate who has one of the following in place of a college degree? [Respondents selected top 3]	Top 3 inclusions
Higher education coursework but no degree	53%
Industry certification	52%
Higher education certificate	39%
Non-higher education certificate	22%
Digital badge	20%
Would not hire without a college degree	10%

What credential is your company most open to using to validate hard skills? [Respondents selected top 3]	Top 3 inclusions
College degree	68%
Industry certifications	47%
Skills bootcamp	23%
Project portfolio	17%
Badging	14%
MOOC	13%

BROADENING STANDARDS FOR CANDIDATE RECRUITING

Companies that face recruiting challenges may consider seeking job candidates with diverse backgrounds. For instance, while 61% of employers often offer jobs to U.S. military veterans, a significant segment (36%) rarely do. In addition, a combined 54% of employers rarely or never offer roles to non-American candidates, so they miss out on a world of recruiting possibilities.

Far fewer employers are open to hiring people who were previously incarcerated. A combined 85% of employers rarely or never offer roles to members of this population, while 15% often do.

How often do you extend job offers to:

	Often	Rarely	Never
Candidates without a four-year degree	55%	41%	4%
U.S. military veterans	61%	36%	3%
Former prison inmates	15%	45%	40%
Non-Americans/ international individuals	46%	42%	12%

Section 3:
Upskilling Employees to Close Skills Gaps

TUITION REIMBURSEMENT

The majority of employers rely on continuing education opportunities to close their skills gap. More than half (52%) reimburse tuition for employees enrolled in upskilling or reskilling programs, and 88% cover at least some tuition costs. Also, a combined 69% of employers cover either most or full tuition costs for employees.

This study found 88% of employers cover at least some costs for upskilling or reskilling programs.

What types of programs are your company investing in to upskill or reskill your workforce?
[Respondents selected all that applied]

Tuition reimbursement	**52%**
Mentoring/reverse mentoring	**37%**
Access to online educational platforms	**35%**
Apprenticeships	**25%**
University-sponsored tuition discounts	**24%**
Company-sponsored scholarships	**23%**
Paid leave for training	**17%**
My company doesn't invest in upskilling or reskilling	**9%**
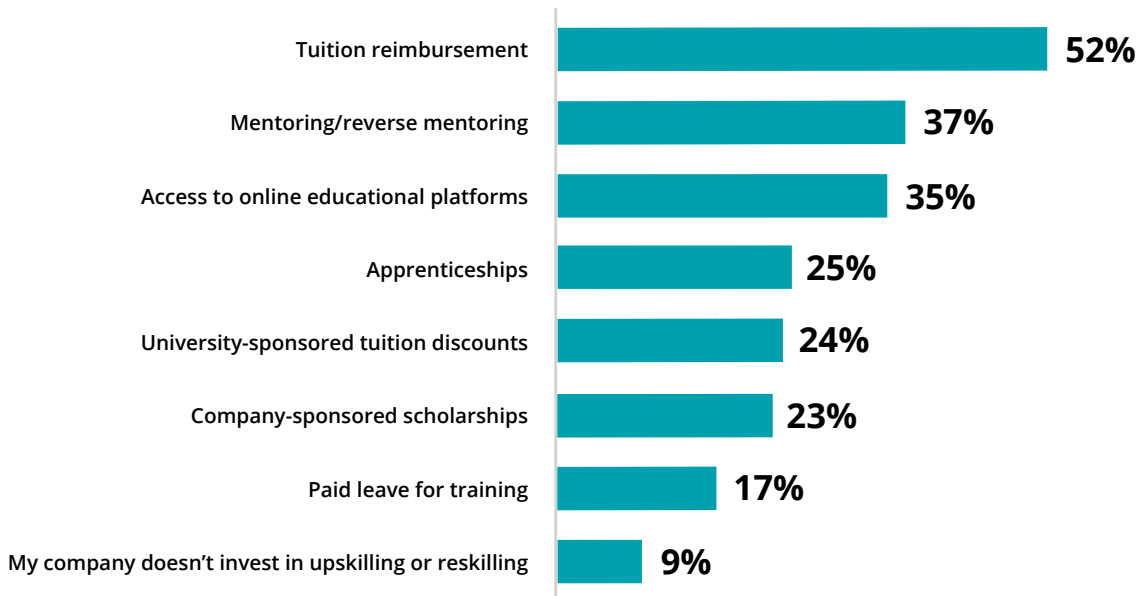
BARRIERS TO FUNDING UPSKILLING PROGRAMS

There is a disparity between how employers value upskilling and their ability to fund upskilling opportunities. Although 68% very often or always communicate the value of upskilling to their workforce, only 48% make an annual investment of $500 or more to upskill each employee.

What are the biggest obstacles to upskilling employees? This study found 40% of HR leaders struggle to secure funds to invest in upskilling programs and 35% lack in-house training resources or find it difficult to identify external training options.

Share of Employers Who Spend More Than $500 Annually to Train Each Employee

Overall learning and development

52%

Upskilling

48%

Reskilling

46%
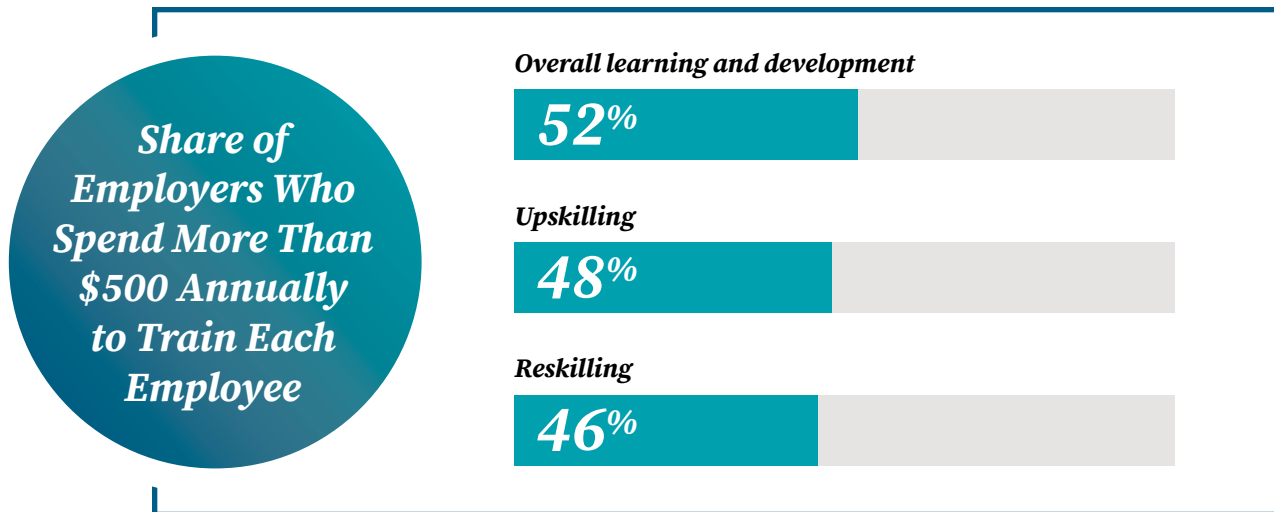
Section 4:
In-Demand Skills and Ways to Acquire Them

USING INNOVATION TO CLOSE THE SKILLS GAP

The pace of technological advancement is accelerating with the global adoption of the Internet, ever more agile robots, and AI that learns and makes decisions. Employers are now willing to harness these innovations to close skill gaps caused by unfilled roles. The share of employers who believe artificial intelligence will help them fill their skills gap increased from 40% in 2018 to 55% in 2019. This study also found that 40% of employers prefer to invest in AI rather than hire or upskill employees, a one-year increase of 11 percentage points.

While employers continue to hire staff to close their skills gap, the reliance on full-time employees has changed during the past year. A preference for gig workers over full-time employees spiked from 38% to 47%. And more than half of employers rely on part-time workers (58%), contract workers (51%), and temporary workers (51%) to round out their skills needs.

Your company prefers to:	Somewhat or strongly agree
Rely on AI to close skills gaps	55%
Hire employees instead of upskilling/reskilling current employees	50%
Hire gig workers instead of full-time employees	47%
Outsource to vendors instead of hiring/upskilling employees	46%
Invest in AI to perform work instead of hiring/upskilling employees	40%

IN-DEMAND SKILLS AND CAREER PREPARATION

While organizations can invest in AI to close skills gaps, employers continue to value certain skills that workers provide. The most in-demand hard skills are strategic thinking and analytical skills (48%), computer skills (46%), and project management (32%). On the soft skills side, employers most desire leadership (39%), adaptability (36%), and communication (36%). With respect to academic study, the most desired college majors are computers and IT (44%), business (42%), and STEM (32%).

Five Most In-Demand Hard Skills

48%	46%	32%	24%	23%
Strategic Thinking & Analytical Skills	Computer Skills	Project Management	Language Skills	Engineering

Five Most In-Demand Soft Skills

39%	36%	36%	27%	20%
Leadership Ability	Ability to Adapt to Change	Communication	Positive Attitude	Teamwork

Five Most In-Demand College Majors

44%	42%	32%	23%	19%
Computers & IT	Business	STEM	Health & Medicine	Education & Teaching
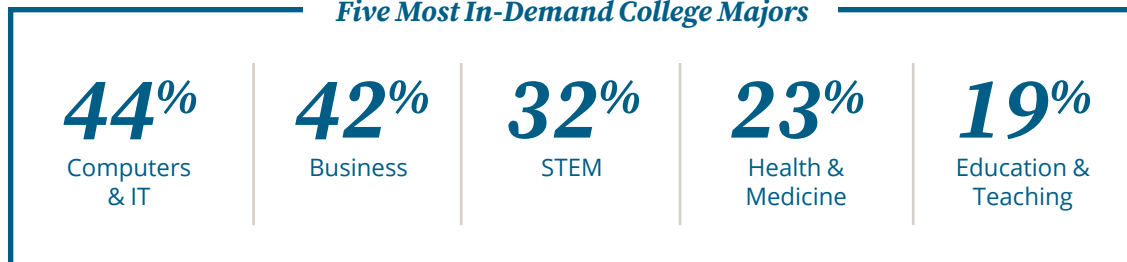
Section 5:
Collaborating With Higher Education to Create Skilled Graduates

PARTNERSHIPS THAT ENHANCE SCHOOL CURRICULUM

Less than half of employers (46%) believe college prepares students to join the workforce. This perceived shortcoming may explain why 64% of employers say their organization has collaborated with schools to make curriculum more responsive to workforce needs. This represents an increase of 14 percentage points since 2018.

Of the employers who collaborate with schools, 79% partner with four-year colleges and 53% partner with community colleges. A smaller share of these employers partner with vocational (30%) and for-profit schools (23%).

Some employers who do not collaborate with schools face barriers to doing so. Examples include a lack of budget (18%), internal politics (13%), uncertainty about how to collaborate with schools (13%), and weak relationships with school officials (9%). However, the leading barrier is self-imposed, as 45% of employers have not attempted a collaboration.

In the past three years, has your organization collaborated with colleges, universities, and vocational schools to make the curriculum more responsive to workplace needs?

2019

12%
24%
64%

2018

7%
43%
50%

Yes | No | Unsure

2019

Yes · No · Unsure

64%
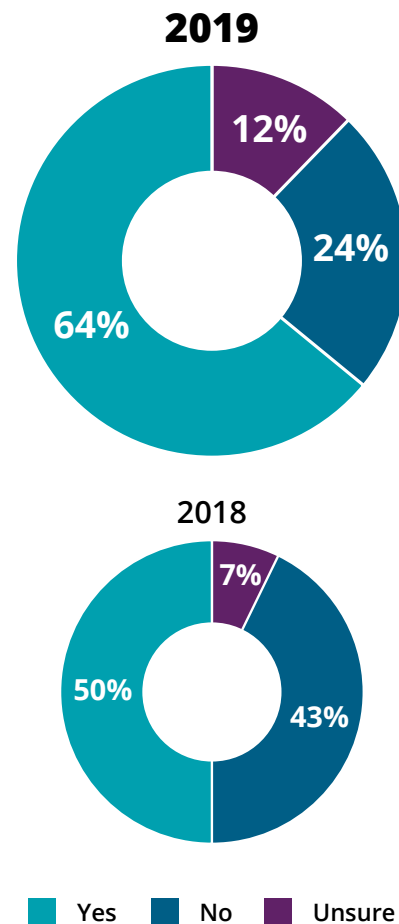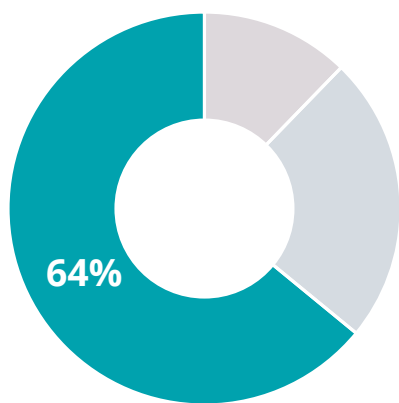
What types of institutions have you partnered with? (Employers who have partnered with institutions)

[Respondents selected all that applied]	
Four-year college or university	79%
Community college	53%
Vocational school	30%
For-profit institution	23%
Technical program	0%
None of the above	1%

2019
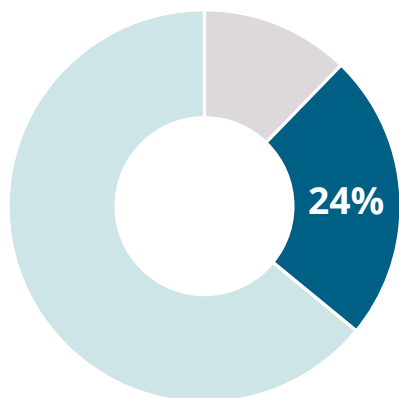
Yes · No · Unsure

24%

Why do you think your company isn't collaborating with colleges, universities, and vocational schools? (Employers who have not partnered with institutions)

We haven't tried	45%
Lack of budget	18%
We aren't sure how	13%
Internal politics	13%
Weak relationships with school officials	9%
We don't have a skills gap	2%

PARTNERSHIPS THAT ENHANCE WORKFORCE RECRUITING

More employers are developing talent pipelines by recruiting students directly from schools. This year's study found that school recruitment helps 60% of employers identify people with the right skills for current and future roles, an increase of 11 percentage points since 2018.

Do the schools/colleges where you recruit have a pipeline of talent with the right skills to fill your current and future roles?

2019

17%

23%

60%

2018

22%

29%

49%

■ Yes

■ No

■ Not sure
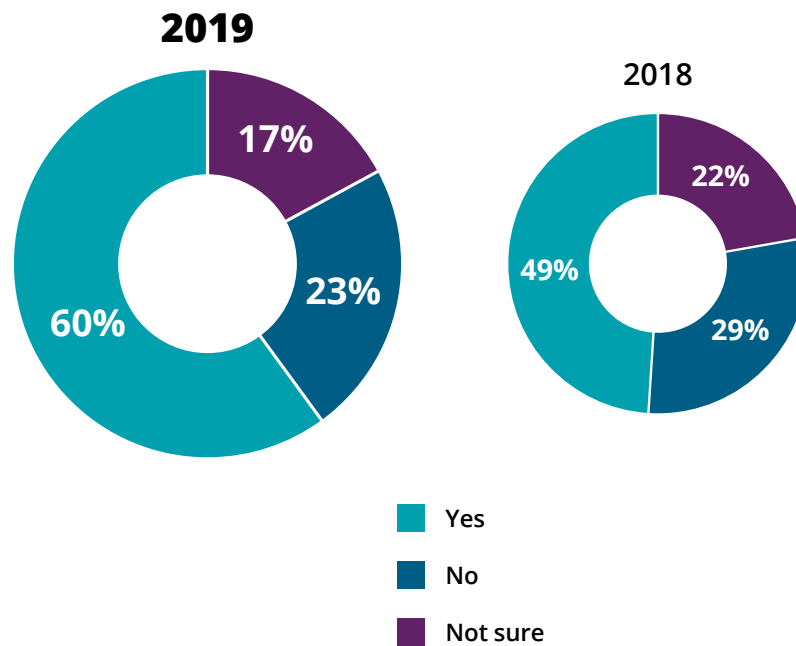
Conclusions

BARRIERS TO CLOSING SKILL GAPS

There are gaps between the skills that organizations need to compete and the capabilities workforces possess. That is the perspective of 64% of employers, a population that grew 12 percentage points in one year. Accelerating technology and a lack of qualified candidates are the greatest barriers to filling open roles, which can prevent employers from acquiring the most in-demand skills.

Most In-Demand Hard Skills	Hardest-to-Fill Roles
Strategic thinking and analytical skills	Operations
Computer skills	Technology and IT
Project management	Management

EMPLOYERS ARE CHANGING HOW THEY CLOSE SKILLS GAPS

Employers recognize the scarcity of certain skills and, to acquire them, appear to be expanding their hiring practices. For instance, 55% would offer jobs to candidates without a four-year degree and 46% prefer to outsource roles to vendors instead of hiring or upskilling employees. Employers also explore solutions beyond human resources, as 55% plan to use AI to close their skills gap.

CLOSING SKILLS GAPS THROUGH TRAINING

Although employers are refining their hiring practices, investing in current workers is a common blind spot. Each year, less than half spend more than $500 to upskill each employee and far fewer provide access to online education platforms or paid leave for training. This indicates employers could close their skills gaps by investing more in training instead of allocating the bulk of funds to recruitment initiatives.

Investing in education benefits and online training for employees can help companies do more than enhance workforce skills. According to *Human Resource Executive* magazine, these initiatives help companies navigate a changing labor market in which more jobs will become obsolete while technology creates occupations requiring new skills. For instance, the professional services company Accenture adapted to a disrupted labor market by adding continuous learning to its company culture, as the company has provided "new-skilling" opportunities to 64% of its more than 450,000 employees. Beyond providing new skills to workers, training is an effective retention tool, which is especially valuable for companies that struggle to recruit new workers.[3]

> *"New-skilling our people was at the heart of our massive talent transformation to ensure they remain relevant and at the forefront of both technology and industry."*
>
> *– Ellyn Shook, Chief Leadership and Human Resources Officer at Accenture*
> Source: *Human Resource Executive* magazine

CLOSING SKILLS GAPS THROUGH PARTNERSHIPS

Partnering with higher education institutions offers a way to build talent via learning programs instead of buying talent through hiring. Through these partnerships, employers can help a school identify hard skills and soft skills to teach during short courses and programs that award a degree, a certificate, or a digital badge. A good starting point would be for employers

to collaborate with a school's subject-matter experts to create badges and certificates that validate in-demand hard skills. Such short-term programs could be especially beneficial for the 35% of employers that lack in-house training expertise.

An oft-cited example of such a collaboration is the online master's degree in computer science developed by Georgia Tech and AT&T. This partnership is impressive because of its scale—it allowed more than 6,000 students to enroll in an in-demand degree program in the spring of 2018 alone.[4] But there are more targeted ways for employers to connect with educators, and these partnerships don't require a direct link with a university.

In 2016, The Software Guild, a Wiley brand, partnered with a Fortune 100 financial services company to reskill workers via coding bootcamps. Through this partnership, instructors from The Software Guild taught software development to non-tech employees at the company's headquarters. This reskilling program allowed the company to close their tech skills gap and retain legacy employees with industry expertise.

ACCESSING GUIDANCE TO LAUNCH THESE INITIATIVES

The initiatives outlined here take time, resources, and deep expertise to develop and implement. Fortunately, Wiley Education Services is here to help. Wiley Education Services partners with companies to implement learning solutions that enhance workforce skills, strengthen employee retention, and boost company performance. Services include education benefits, coding bootcamps, and college tuition discount programs. Learn more at edservices.wiley.com.

Appendix:
Responses by Organization Size

The "N" in each row indicates the number of respondents whose organization matches the employee counts listed.

EXPLORING THE SKILLS GAP

Is there a skills gap in your organization right now?	Yes	No	Not Sure
Fewer than 1,000 employees (N=120)	53%	37%	10%
1,000 to 2,499 (N=125)	75%	19%	6%
2,500 to 9,999 (N=122)	73%	21%	6%
10,000 to 29,999 (N=80)	61%	25%	14%
30,000 to 49,999 (N=46)	76%	20%	4%
50,000 or more (N=107)	49%	36%	15%

Has filling open positions to close your skills gap been harder this year compared to 2018?	Harder	The same	Easier
Fewer than 1,000 employees (N=120)	34%	51%	15%
1,000 to 2,499 (N=125)	48%	42%	10%
2,500 to 9,999 (N=122)	48%	45%	7%
10,000 to 29,999 (N=80)	54%	38%	8%
30,000 to 49,999 (N=46)	50%	37%	13%
50,000 or more (N=107)	37%	50%	13%

How will baby boomers retiring impact the skills gap in your organization?	Much narrower	Narrower	No impact	Wider	Much wider	We don't have a skills gap
Fewer than 1,000 employees (N=120)	7%	18%	39%	20%	5%	11%
1,000 to 2,499 (N=125)	10%	34%	30%	17%	6%	3%
2,500 to 9,999 (N=122)	12%	25%	23%	31%	8%	1%
10,000 to 29,999 (N=80)	7%	23%	33%	27%	6%	4%
30,000 to 49,999 (N=46)	4%	35%	9%	37%	11%	4%
50,000 to more (N=107)	10%	20%	38%	19%	10%	3%

HIRING PRACTICES

How open are you to hiring a candidate who has one of the following in place of a college degree? [Select all that apply]	Digital badge	Industry certification	Higher education coursework but no degree	Non-higher education certificate	Higher education certificate	We aren't open to hiring a candidate without a college degree
Fewer than 1,000 employees (N=120)	19%	55%	52%	21%	40%	11%
1,000 to 2,499 (N=125)	21%	50%	50%	23%	37%	9%
2,500 to 9,999 (N=122)	17%	60%	56%	19%	41%	5%
10,000 to 29,999 (N=80)	18%	50%	58%	25%	38%	11%
30,000 to 49,999 (N=46)	39%	50%	43%	20%	30%	7%
50,000 or more (N=107)	17%	42%	54%	24%	43%	15%

What credentials is your company most open to using to validate hard skills? [Choose top 3]	College degree	Skills bootcamp	Badging	Industry certifications	Project portfolios	MOOC certificates
Fewer than 1,000 employees (N=120)	68%	20%	10%	49%	20%	12%
1,000 to 2,499 (N=125)	67%	26%	11%	47%	19%	16%
2,500 to 9,999 (N=122)	66%	23%	19%	52%	19%	16%
10,000 to 29,999 (N=80)	66%	30%	14%	46%	13%	10%
30,000 to 49,999 (N=46)	65%	20%	39%	33%	15%	9%
50,000 or more (N=107)	72%	18%	4%	45%	14%	10%

How often do you extend job offers to candidates without a four-year degree?	Often	Rarely	Never
Fewer than 1,000 employees (N=120)	58%	37%	5%
1,000 to 2,499 (N=125)	60%	38%	2%
2,500 to 9,999 (N=122)	57%	40%	3%
10,000 to 29,999 (N=80)	49%	48%	3%
30,000 to 49,999 (N=46)	48%	52%	0%
50,000 or more (N=107)	51%	42%	7%

How often do you extend job offers to U.S. military veterans?	Often	Rarely	Never
Fewer than 1,000 employees (N=120)	48%	45%	7%
1,000 to 2,499 (N=125)	58%	40%	2%
2,500 to 9,999 (N=122)	64%	33%	3%
10,000 to 29,999 (N=80)	56%	43%	1%
30,000 to 49,999 (N=46)	72%	26%	2%
50,000 or more (N=107)	74%	22%	4%

How often do you extend job offers to former prison inmates?	Often	Rarely	Never
Fewer than 1,000 employees (N=120)	9%	41%	50%
1,000 to 2,499 (N=125)	20%	54%	26%
2,500 to 9,999 (N=122)	16%	43%	41%
10,000 to 29,999 (N=80)	20%	48%	32%
30,000 to 49,999 (N=46)	15%	33%	52%
50,000 or more (N=107)	11%	46%	43%

How often do you sponsor and offer jobs to non-American/international individuals?	Often	Rarely	Never
Fewer than 1,000 employees (N=120)	39%	43%	18%
1,000 to 2,499 (N=125)	43%	45%	12%
2,500 to 9,999 (N=122)	46%	47%	7%
10,000 to 29,999 (N=80)	50%	38%	12%
30,000 to 49,999 (N=46)	52%	35%	13%
50,000 or more (N=107)	49%	40%	11%

Have you ever hired an individual who was considered retired and not currently employed?	Yes	No	Not sure
Fewer than 1,000 employees (N=120)	68%	19%	13%
1,000 to 2,499 (N=125)	65%	19%	16%
2,500 to 9,999 (N=122)	58%	30%	12%
10,000 to 29,999 (N=80)	64%	25%	11%
30,000 to 49,999 (N=46)	65%	20%	15%
50,000 or more (N=107)	66%	9%	25%

UPSKILLING AND RESKILLING OPPORTUNITIES

What types of programs is your company investing in to upskill or reskill your workforce? [Select all that apply]	Tuition reimbursement	Company-sponsored scholarships	University-sponsored tuition discounts	Access to online educational platforms	Mentoring/reverse mentoring	Apprenticeships	Paid leave for training	My company doesn't invest in upskilling or reskilling
Fewer than 1,000 employees (N=120)	38%	11%	22%	33%	32%	23%	15%	20%
1,000 to 2,499 (N=125)	45%	30%	26%	35%	42%	28%	18%	9%
2,500 to 9,999 (N=122)	52%	21%	29%	36%	39%	28%	16%	6%
10,000 to 29,999 (N=80)	66%	21%	28%	36%	38%	23%	19%	1%
30,000 to 49,999 (N=46)	43%	30%	26%	37%	39%	26%	28%	7%
50,000 or more (N=107)	68%	27%	18%	36%	36%	22%	11%	8%

PARTNERSHIPS BETWEEN ENTERPRISE AND HIGHER EDUCATION

In the past three years, has your organization collaborated with colleges, universities, and vocational schools to make the curriculum more responsive to workplace needs?	Yes	No	Unsure
Fewer than 1,000 employees (N=120)	56%	32%	12%
1,000 to 2,499 (N=125)	65%	25%	10%
2,500 to 9,999 (N=122)	75%	16%	9%
10,000 to 29,999 (N=80)	65%	29%	6%
30,000 to 49,999 (N=46)	76%	9%	15%
50,000 or more (N=107)	55%	23%	22%

What types of institutions have you partnered with? [Select all that apply]	Four-year college or university	Community college	Technical program	For-profit institution	Vocational school	None of the above
Fewer than 1,000 employees (N=67)	78%	60%	0%	18%	37%	3%
1,000 to 2,499 (N=81)	73%	54%	0%	17%	31%	1%
2,500 to 9,999 (N=91)	84%	49%	0%	25%	26%	0%
10,000 to 29,999 (N=52)	73%	42%	0%	29%	17%	0%
30,000 to 49,999 (N=35)	91%	66%	0%	20%	23%	0%
50,000 or more (N=58)	78%	48%	0%	29%	41%	2%

Appendix: Responses by Organization Size
Closing the Skills Gap 2019

Why do you think your company isn't collaborating with colleges, universities, and vocational schools? [Select all that apply]	Weak relationships with school officials	Internal politics	Lack of budget	We aren't sure how to	We haven't tried to collaborate with schools	We don't have a skills gap
Fewer than 1,000 employees (N=38)	5%	11%	16%	11%	55%	2%
1,000 to 2,499 (N=31)	7%	16%	19%	16%	36%	6%
2,500 to 9,999 (N=20)	10%	5%	20%	20%	45%	0%
10,000 to 29,999 (N=23)	13%	9%	9%	13%	52%	4%
30,000 to 49,999 (N=4)	0%	25%	25%	0%	50%	0%
50,000 or more (N=25)	16%	20%	24%	8%	32%	0%

Methodology

In the spring of 2019, 600 human resource leaders across the U.S. were surveyed by Savanta, a global market research company, on behalf of Future Workplace and Wiley Education Services. These individuals were asked about their hiring processes and difficulties they faced when seeking to identify qualified candidates.

The majority of survey respondents were in managerial roles, and their organizations represent a diverse cross section of the U.S. economy.

Respondent's seniority in their organization:

% of Respondents	%
C-level/executive	16%
Senior management/VP	19%
Junior/middle management	38%
Employee (not managing others)	27%

Industry of respondent's company:

% of Respondents	%
Manufacturing	10%
Retail and/or hospitality	12%
Health care	17%
Education	15%
Public sector/public service	10%
Financial services	11%
Logistics	3%
Field services/contract services/customer support	5%
Non-profit	3%
Other	15%

TECHNICAL NOTES

All percentages in this report have been rounded; therefore, the total percent figure in a table may not equal 100. Furthermore, if the total percentage is substantially more than 100, it is because the question allowed respondents to choose more than one option.

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