

CENGAGE
GROUP

Cengage Group 2023 Graduate Employability Report: AI Joins the Workforce



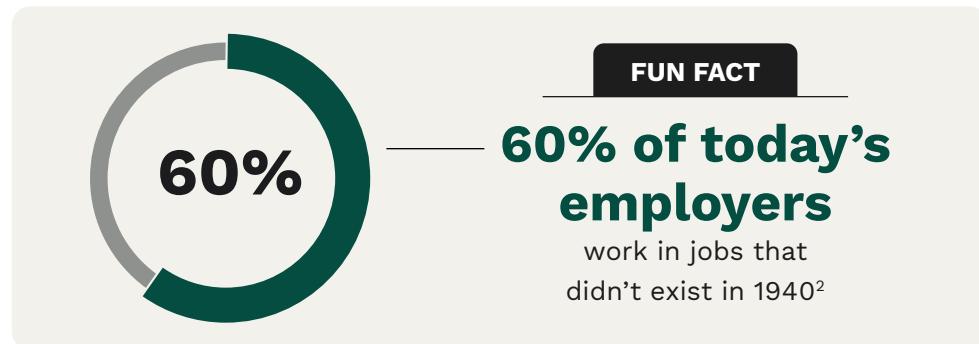
June 2023

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After years characterized by The Great Resignation and Quiet Quitting, the job landscape in 2023 has been transformed by something quite different. The introduction – and growing adoption – of generative artificial intelligence (AI) has had a significant impact on the workforce in nearly every industry.

According to economists at Goldman Sachs, approximately two-thirds of U.S. occupations are likely to see some degree of automation by AI.¹ This does not mean that the same percentage of jobs will evaporate, but rather that the workforce will need to acquire new skills or, perhaps, adapt to new occupations that emerge in the wake of widespread AI adoption. The fear that AI will eliminate jobs is real – and nothing new. As technologies have advanced, new career options have always been created.



For the 2023 Cengage Group Employability Survey, we added questions about AI and its impact on the workforce readiness of recent graduates as well as employers' plans for hiring. We surveyed 1,000 recent graduates of both degree and non-degree programs (certifications, vocational training), as well as 1,000 employers to better understand their current feeling about employability, new technology and hiring and training plans. What we found was a quickly shifting employment landscape in which many hiring managers are prioritizing the softer skills – emotional intelligence, negotiation, communication and the like – and a candidate's ability to work with the help of artificial intelligence. We also found that AI has some recent grads second-guessing their career choice and debating whether to develop AI-related skills training and/or pursue certification.

We also found that the tide may be turning in favor of skills-based hiring. Our survey found progress has been made in some employers lifting – or at least loosening – 2- or 4-year degree requirements for entry-level positions, which has some job seekers wondering how to best highlight their skills and aptitude for a job opening. On the other hand, this reduced focus on degrees in job postings has many recent graduates feeling more confident in their readiness to join the workforce, citing a growing number of job postings that do not include a degree requirement.

What's behind this move away from degree requirements? It could be that many employers continue to struggle to find workers.

While down from 65% in 2022, **today more than half of employers (53%) say they cannot identify qualified candidates for many positions.**

Degree requirements automatically screen out the more than 60% of American workers over the age of 25 who do not hold a four-year degree. By loosening those requirements, employers are immediately opening a bigger (and more diverse) talent pool, making it easier to find candidates.

¹ Generative AI Could Raise Global GDP by 7%

² New Frontiers: The Origins and Content of New Work, 1940–2018

We've also seen growing attention on skills-based hiring and awareness that people can acquire skills through alternative routes, with campaigns like #TearthePaperCeiling from Opportunity at Work in partnership with leading organizations like Google, Walmart and Accenture, and support from the Ad Council. In addition, in 2020 the federal government publicly announced a shift to skills-based hiring with an Executive Order to remove degree requirements for many federal job listings in favor of a more assessment-based hiring process. Many state governments also followed suit removing degree requirements for certain roles in Maryland, Colorado, Georgia, Pennsylvania, New Jersey and several other states.

This report digs deeper into these trends and more, providing insight into the mindset of today's employers and entry-level job seekers around job readiness, job requirements and the growing reliance on skills-based training and certification to signal a candidate's qualifications for a role. It is designed to provide a better understanding of the hiring trends that are the result of not only lingering labor shortages but also the sea change in the technical skills needed in nearly every industry brought on by artificial intelligence.

At Cengage Group, we recognize that today's employment landscape is unfamiliar terrain for those on both sides of the hiring process. We hope this report will help employers and candidates alike consider all education pathways available to find success.

Key Findings

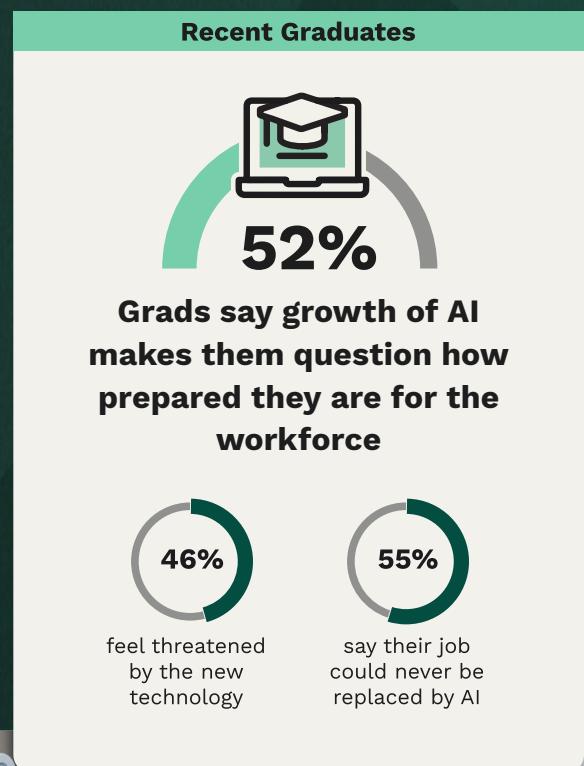
Finding 1:

Graduates' worries about AI and job security will fuel a reskilling boom.

More than half of graduates (52%) say growth of AI makes them question how prepared they are for the workforce. Meanwhile, grads are split about whether their job will be replaced by AI (46% feel threatened by the new technology, while 55% say their job could never be replaced by AI).

Additionally, AI is causing more than one third of employers to second guess how many new hires they are making, and **more than half of employers (57%) say certain entry-level jobs – or even entire teams – could be replaced by AI.**

More than two-thirds (68%) say many employees will need to reskill or upskill in the next three to five years because of emerging technology and graduates agree – 6 in 10 (61%) say they will need to develop or strengthen their digital skills due to AI.



Key Findings

Finding 2:

Skills-based hiring is gaining traction and graduates are feeling more confident as a result.

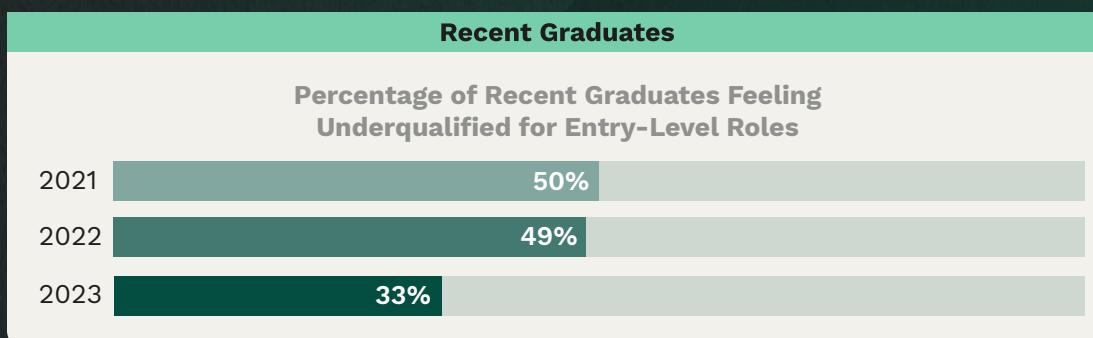
Compared to survey data from 2022, **fewer employers say they require degrees for entry-level roles (50% in 2023 compared to 62% in 2022).**



And more employers in 2023 say they require a skills training credential (33% in 2023 compared to 26% in 2022), which coincides with what grads say – they are seeing more jobs with no degree requirements.

This is leading some graduates to lose confidence that a degree is a best signal to employers of the skills they have – 23% in 2023, down from 32% in 2022.

The loosening of degree requirements could also be why grads are feeling more confident and qualified to apply for entry level jobs (**only 33% felt underqualified to apply for entry-level roles in 2023 whereas 49% and 50% felt underqualified in 2022 and 2021 respectively**).

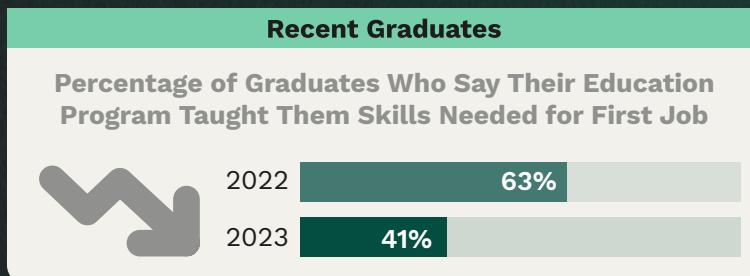


Key Findings

Finding 3:

Higher Education needs to make a greater connection to employment.

Higher education providers still need to get better at teaching employability skills (**only 41% of grads said their program taught them skills needed for their first job, down from 63% in 2022**).



Soft skills continue to be a need among grads – and will only become more important in the future as employers expect “uniquely human” skills to be more important with the growth of AI.

Fewer grads reported having internships, externships and apprenticeships in 2023 (down to 47% from 63%), **and more than a third of those grads (35%) had to find the work experience themselves**. Only 16% of employers said they found most of their new hires through partnerships with colleges or universities, such as through career centers or on-campus programs.

Almost 6 in 10 grads (58%) believe employers should work more closely with colleges or learning programs to help them develop educational courses or learning programs that help grads get the skills needed to perform a job.



6 in 10

Grads believe employers should work more closely with colleges to develop educational courses

Key Findings: A Closer Look

Grads are (rightly) worried about AI, upskilling might be the answer

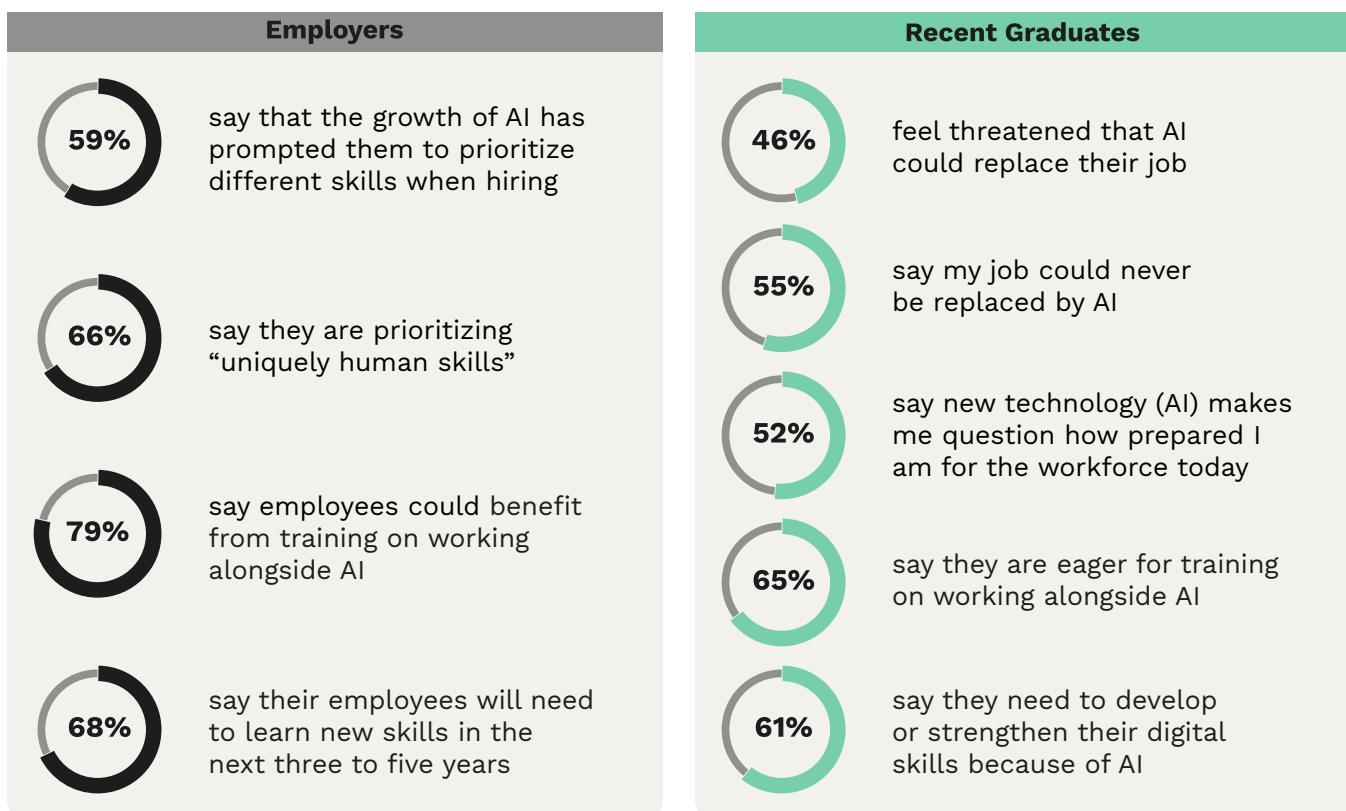
The arrival of generative AI platforms, like ChatGPT, have a third of grads second-guessing their career choice. Additionally, more than half (52%) say competition from AI has them questioning how prepared they are for the workforce. They are split, however, on whether their job would be replaced by AI, with 46% feeling threatened and 55% believing their job could never be fully replaced by AI.

Meanwhile, AI is already changing employers' hiring habits. **Nearly 3 in 5 employers (59%) say that the growth of AI has prompted them to prioritize different skills when hiring**, with 66% saying they are now looking for "uniquely human" skills and that previous job experience will become more important in hiring decisions.

Employers overwhelmingly agree (79%) that employees could benefit from training on working alongside AI and other new technologies in their current roles. Additionally, 68% say many of their employees will need to learn new skills in the next three to five years – either to stay up-to-date for their existing role or a new one for those that emerging technologies are likely to make obsolete.

Recent grads are eager for training on working alongside AI and other new tech platforms (65%), recognizing that they will need to develop or strengthen their digital skills because of AI.

How Employers and Recent Graduates Feel About AI



Human Coworker or AI?

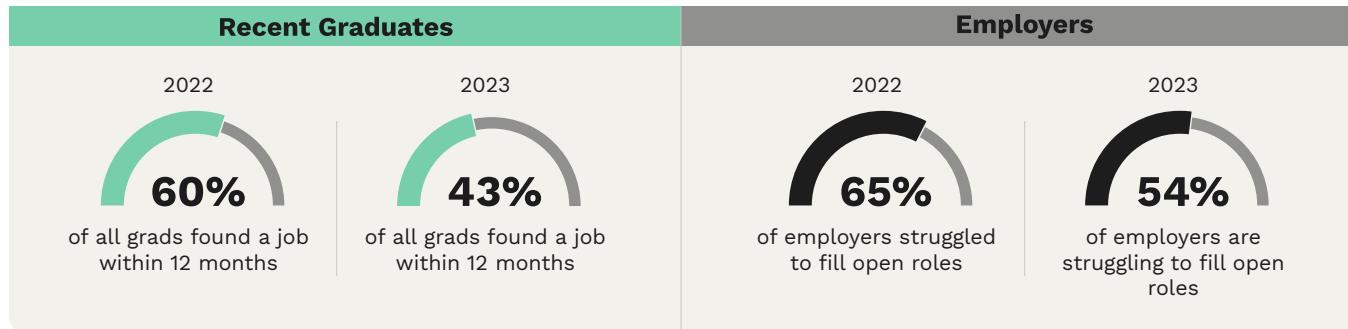
While working with AI might become the norm and might replace some jobs, employers and graduates still prefer their human colleagues.

Would you rather work with AI or robots than real people?



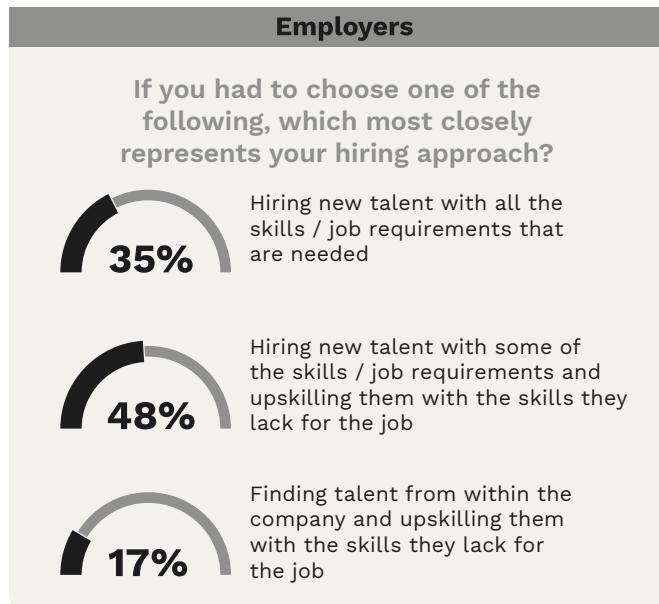
As the hot job market cools slightly, the struggle to find talent remains.

Is the job market cooling off?



More than half (53%) of employers say they struggle to find talent, a significant decrease from 2022 when 65% admitted they could not fill open roles. These employers continue to tap the same sources for talent, with most looking to online job sites (25%) and professional networking platforms (17%), such as LinkedIn, Indeed and the like.

Employers, however, are showing a willingness to train or upskill candidates who may not have all of the skills needed for a particular job. In fact, nearly half of employers (48%) say they hire talent with some but not all of the skills needed for a role and upskill them, and 17% said they find talent from within the company and upskill them. Other industry research supports this approach as it is often more economical for employers to “build” talent with the skills needed for a role than to “buy” talent that is already trained with the prerequisite skills.



Degree requirements may be waning, but it varies by industry

Half (50%) of employers surveyed still require 2- or 4- year degrees for entry level positions, which is down significantly from the more than 6 in 10 (62%) that required them in 2022. Tech applicants (64%) are the most likely to encounter a degree requirement, followed by manufacturing (49%) and healthcare (45%). Of those employers who require degrees, nearly half (45%) said they require them because the discipline required to earn a degree makes candidates more equipped for the workforce.

Does your company require a degree for all entry-level positions?

	2022	2023	% Change
TOTAL (All Employers)	62%	50%	-19%
Healthcare	50%	28%	-44%
Manufacturing	57%	31%	-45%
Technology	81%	43%	-47%

Not surprisingly, since roughly half of employers require a degree for entry level roles, roughly half (51%) also recommend that a prospective candidate seeking work at their company have a degree.

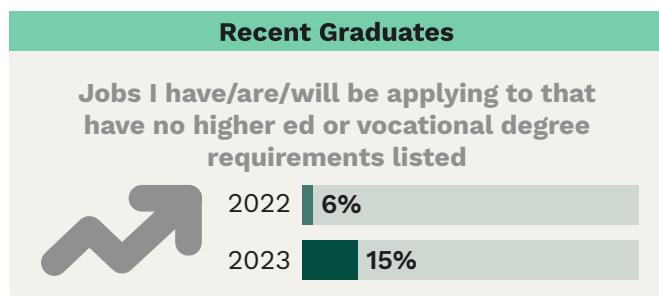


However, and potentially more telling, is that employers admit college degrees are NOT the most important aspect when considering a candidate for an entry level job. In fact, a skills training credential (39%) and real world experience (34%) are more highly valued by employers. In fact, fewer employers this year (19%) said a college degree is most important when considering a candidate for a role (down from 26% in 2022).

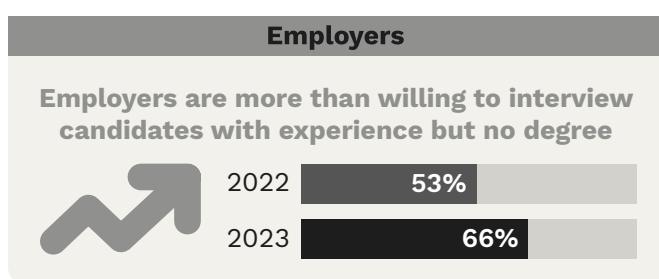
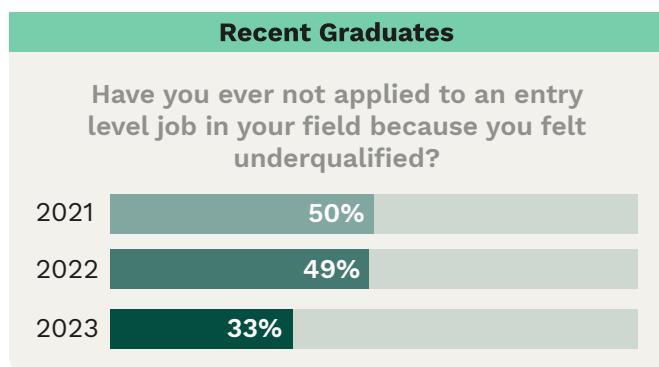


Skills-based hiring is gaining traction, but room for improvement remains.

In addition to fewer employers saying they are requiring degrees for entry level roles, graduates are reporting seeing more job listings without degree requirements.



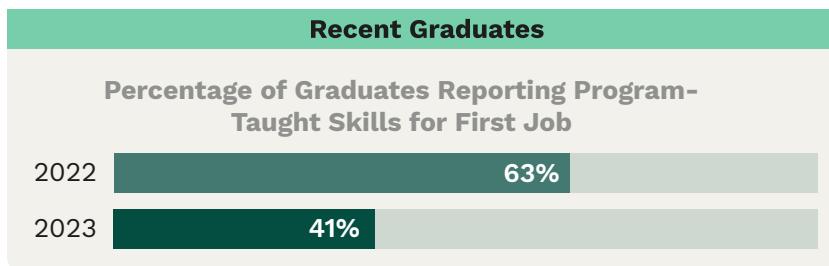
Recent degree and non-degree graduates are feeling more confident regarding their qualifications to apply for entry-level jobs, with only one-third (33%) stating they felt underqualified, down significantly from the last two years in which roughly half felt underqualified.



In addition, approximately 3 in 5 employers (61%) report seeing an increase in non-degree applicants.

Higher Ed needs to do more on employability

Higher education institutions still fail to teach grads many employability skills: Only 41% of graduates said their program taught them skills needed for their first job, down from 63% in 2022. When it came to what skills they weren't taught, about a quarter said soft skills instruction was lacking. And grads are eager for more assistance: nearly 6 in 10 (58%) of graduates said employers should work more closely with colleges and other learning programs to develop educational courses or programs that teach students the skills they'll need in the workplace upon graduation.

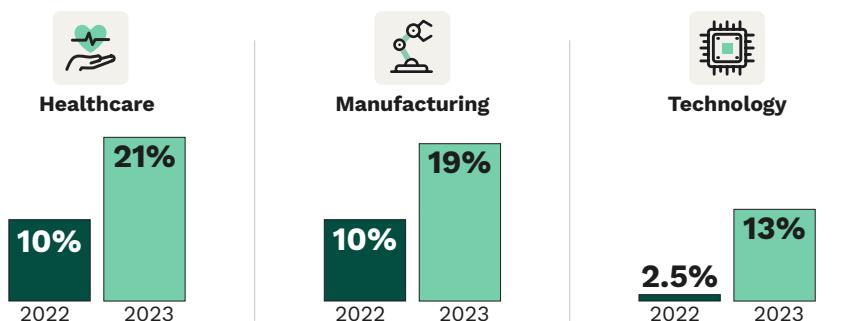


Soft skills such as emotional intelligence, negotiation, persuasion and communication are lacking among grads – and will only become more important in the future as employers will expect these uniquely human skills as AI increasingly takes on more rote tasks.

Internships, externships and apprenticeship programs, which can expose students to these skills as well as real-world work experience, seem to be harder to find – and students are often on their own to find them. Fewer than half of grads (47%) participated in these programs this year, compared with 63% in 2022. Of those who did, more than a third (35%) did not receive any guidance from their school in finding one.

Half of all graduates (49%) say their educational institution should be held accountable for placing them in jobs upon graduation, and graduates of degree programs are even more likely than non-degree grads to want their institution to be accountable for employment connection.

Dropping the Degree: Just 50% of today's employers require a 2- or 4-year degree for entry-level jobs. Here's the percentage of non-degree jobs in three top industries.



Which of the following best describes the skills you did not obtain, but that you needed to perform your first job?
Select all that apply.

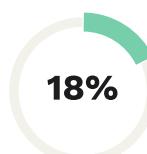
(Responses are from recent grads who felt they weren't taught skills needed for their first jobs)



Specific job function skills relevant to my field/industry (e.g., coding)



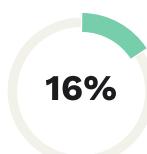
Soft skills (communication, problem-solving, teamwork, etc.) and people management (leading teams, giving performance reviews, offering feedback, etc.)



Digital skills (computer training, coding, using automation / AI, etc.)



Time management (managing priorities, productivity, business operations insight, etc.)



I don't know

Cultivating human skills for an AI-enhanced workforce

The employment landscape is experiencing a seismic shift as AI begins to reshape workloads, job requirements, and even entire industries. This year's research found uncertainty on many levels: whether two- and four-year degrees remain the key metric to measure a candidate's qualifications, how new graduates can best prepare to work alongside AI, which job prospects will AI take over, where graduates should focus learning / training to remain competitive in the job market and more.

AI may be what the working world needed to kick-start the shift toward skills- and experience-based recruitment. And it's also exacerbating the lack of education and training around

the soft skills only a human can bring to the workplace. These shifts are prompting recent graduates to consider supplementing their traditional two- or four-year degree with specialized AI-related training to make their resume more compelling for hiring managers.

Employers, too, are seeing more value in certification and non-degree training programs, so much so that they've loosened degree requirements and are focusing on skills-based hiring for many positions. The talent gap and labor shortages will not go away, regardless of the impact of AI on any sector, and reducing degree requirements widens the talent pool that employers can choose from, since the majority of American workers do not hold a four-year college degree.

It will take time to determine the ultimate impact that AI will have on the workplace. But initial signs indicate that the traditional two- or four-year college degree that has been the pathway to

career success for generations may be less of a guarantee in the future. It's clear that AI-related training and skills-based hiring are gaining prominence.

Graduates should consider augmenting their education with AI-focused training to enhance their employability, and employers should recognize the value of a diverse talent pool that includes individuals with both technical knowledge and essential soft skills. By adapting to these changes, both graduates and employers can navigate the evolving job market.



Methodology:

When

June 2023

How

Two surveys conducted with online platform

The findings in the Cengage Group 2023 Graduate Employability Report are the result of two surveys conducted by Cengage via the online platform Pollfish in June 2023. The graduate survey targeted 1,000 U.S. men and women between the ages of 18 and 65 who had completed an education program (i.e., associate, bachelor's or graduate degree or vocational training or certification) for their perspectives on their recent experience seeking employment. The employer survey targeted 1,000 U.S. men and women between the ages of 18 and 65 who has hiring responsibilities within their organization for their views on determining a candidate's fitness for a specific role.

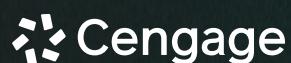
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**With more than 100 years serving learners,
Cengage Group is a global edtech company
that enables student choice.**

No matter how, where, when or why someone wants to learn, our portfolio of education businesses supports all students, from middle school through graduate school and skills education, with quality content and technology. Collectively, our three business units – Cengage Academic, Cengage Work and Cengage Select – help millions of students each year in more than 125 countries achieve their education and career goals and lead choice-filled lives.

For more information about the report, contact: cengage@shiftcomm.com

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