



Closing the Skills Gap with Dynamic Partnerships

November 2024

The imperative to close the skills gap

There is a skills gap in America. The meteoric rise of technologies like Generative AI, rapidly evolving industry demands, emerging societal and economic trends, and changes in educational paradigms have led to a significant disconnect between the competencies and skills that employers seek and the qualifications recent graduates possess. Studies abound about the issue, citing employers believe anywhere from **20%¹–40%² of recent college graduates are not prepared for the workforce**, and up to **94% avoid hiring them³**. Coupled with the rise of skills-based hiring, employers have started to look at hiring nontraditional candidates that might not have a traditional college degree⁴, even though a college degree remains the main avenue to wealth attainment for the student⁵ and signal that a potential hire has the foundational knowledge to not only do a job, but to foster more innovation within a company.⁶



There are many structural reasons for the current skills gap: technology innovations **rapidly change job requirements** and the skills needed to perform, **limited information sharing** between employers and higher education leads to a lack of shared understanding about changes in jobs or the workplace, and **student experiences in highly structured educational environments** often do not match the ambiguous world of work. While these insights are not surprising, there is limited information on exactly what skills employers believe are missing and, more importantly, what employers, higher education institutions, and students themselves can do to close the skills gap and ensure a vibrant and dynamic ecosystem that allows employers to confidently hire and retain recent graduates and for these graduates to thrive in the everchanging labor market.

Solving the issues associated with the current skills gap will require a **departure from the traditional Train-Place-Retain approach** that has defined the labor market for the past half of a century and necessitates shifts across the ecosystem in mindset, culture, and institutions. Significant challenges exist in crafting a

vibrant ecosystem that openly (and in a timely manner) shares information, fosters flexible educational environments adaptive to changes in the labor market, and confidently prepares future generations for the changes that will come. Robust, dynamic, and inclusive partnerships will be foundational to the formation of a thriving labor market that can respond more easily to future challenges.

From a macroeconomic perspective, these partnerships are crucial for sustaining economic growth and competitiveness in the economy that will continue to change as technologies like GenAI continue to disrupt jobs and change industry needs. Partnerships enhance productivity by aligning educational outcomes with industry needs on a constant basis, drive innovation and technological advancement through information and idea sharing, and foster economic diversification and resilience by preparing students for a world of work that is defined by constant change. This improved labor market efficiency can drive further macroeconomic benefits by creating opportunities for higher wages and elevating living standards as students can more quickly adapt to the changing nature of work.

1 2023, November 30 "How College Contributes to Workforce Success: Employer views on the subject matter most" AAC&U,

2 2023, August 30, "4 in 10 Business Leaders Say Recent College Grads Are Unprepared to Enter Workforce", Intelligent

3 2023, August 30, "4 in 10 Business Leaders Say Recent College Grads Are Unprepared to Enter Workforce", Intelligent

4 2022, November, "US Labor Market Outlook", Burning Glass Institute

5 2019, June 17, "College Across Generations Leads to More Wealth", Federal Reserve Bank of St. Louis

6 2023, February 1, "How Business Benefit When Employees Earn College Degrees" Forbes

Defining the skills gap

To move this conversation forward, analyze key skills gaps, and define possible solutions, the Association to Advance Collegiate Schools of Business (AACSB) fostered a collaborative relationship between Deloitte and the Quinnipiac University School of Business in early 2024. Together, Deloitte and Quinnipiac School of Business conducted three focus groups in which we interviewed 12 individuals at different stages in their careers. These individuals were divided into three groups: recent graduates from undergraduate programs, recent graduates from graduate programs, and frontline managers who lead recent graduates. Each group included diverse areas of study, diverse educational backgrounds, and were a diverse sampling of race, gender, and geography.

Focus group participants

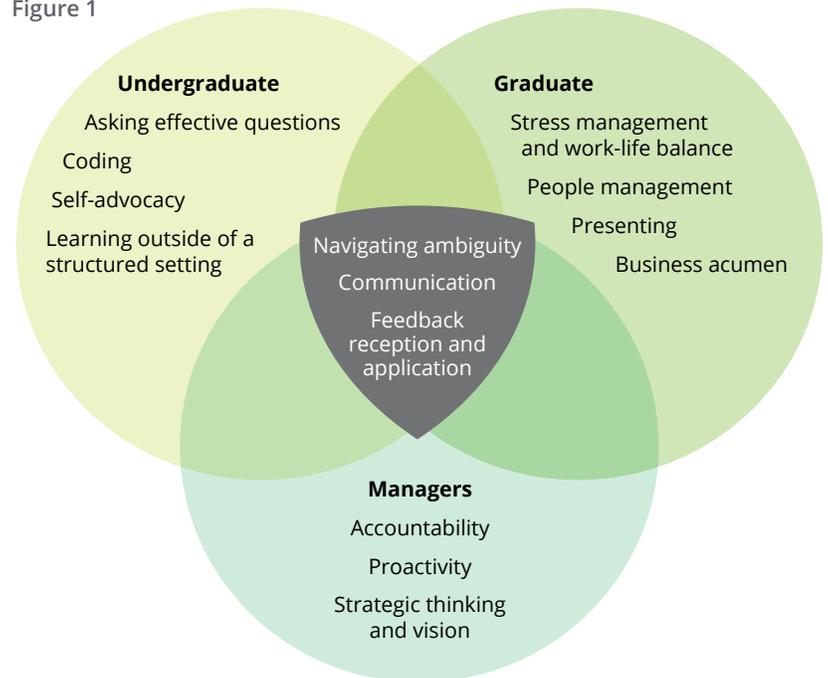
Focus group 1: Recent undergraduate student	<ul style="list-style-type: none"> • 0–2 years of experience post-graduation
Focus group 2: Recent graduate student	<ul style="list-style-type: none"> • MBA, PhD • 0–2 years of experience prior to graduate program • Full-time and part-time graduate programs
Focus group 3: Managers	<ul style="list-style-type: none"> • Senior management • 8–20 years of experience

Deloitte and Quinnipiac University codeveloped questions to focus on the skills participants felt were most important in their jobs, whether they learned these skills while in school, and which skills they felt were needed, but missing from their college or graduate education experience. Although distinct skills gaps were identified from each group (see Figure 1), a common set of needed skills emerged across all groups: **navigating ambiguity, communication skills, and responding to and applying feedback**. These insights are at the heart of the critical areas where targeted efforts and changes could significantly enhance workforce readiness. Figure 1 highlights the individual skills that each group identified as a need or a gap.

Enabling sustainable change

Solving the skills gap will require a **departure from the traditional Train-Place-Retain approach** that has defined the labor market for the past half of a century and necessitates shifts across the ecosystem in mindset, culture, and institutions. Higher education

Figure 1



institutions, employers, and students all have critical actions they can take to create a vibrant labor market that is responsive and adaptive to change and thus prepared for today's challenges and those to come.

The role of higher education institutions

Agile curriculum development

With rapid changes affecting most academic areas, especially in business education, focus group participants stated that they struggled to apply foundational knowledge learned in school to their real-world jobs. For centuries, higher education institutions have excelled at designing and developing curriculum for students to establish a strong foundational knowledge of a subject that allowed for a recent graduate to thrive in the environment where employees were hired and spent their career within a single organization, learning on the job and through employer-management of career progression (Train-Place-Retain). Curriculum is vetted through strict and careful review processes to ensure academic accuracy while maintaining academic freedom and complying with regulatory requirements. While individual faculty can adapt their individual courses on a term-by-term basis, new courses can take months to launch and new programs or significant changes to program objectives may take years. **This approach to curriculum development and change often does not meet the**

speed of change that is happening in the market.

Higher education institutions can apply a more agile curriculum development approach that allows them to meet the speed of change, while maintaining academic integrity and freedom. Deans, department heads, and professors can establish working groups that allow them to stay well-versed on market trends and how they impact their curriculum. Rather than taking 1–5 years, departments can review and update curriculum annually, or even every semester.

Increase flexible pathways and learning opportunities

Recent graduates in our focus groups cited that they were surprised by how different college was from the real-world, in particular, in how unstructured and unpredictable jobs and work can be. This was compared to the very structured nature of their educational experience, where students knew what to expect in their coursework and were able to prepare accordingly. Traditional major and minor programs where students know what their pathway will be for the four years are yet another way in which the educational experience is highly structured. Recent graduates attributed **this structured nature as an important**

factor in limiting their preparedness for the ambiguous nature of work,

where deliverables and due dates can change depending on external factors like client requests, accelerated timelines, and more. Furthermore, they pointed to limited ability to broaden their knowledge beyond their major area of specialization. As jobs continually change and technology such as AI applications can do a lot of the routine work in some fields, many jobs now require broader and more adaptable skills beyond those learned in a single major area of specialization.

To address this, colleges and universities can reduce the one-size-fits all major pathway. While major programs will still be central to the student's academic journey and are integral to the quality ensured by accreditation, colleges and universities can incorporate topical minors and innovations that offer students additional options. Such innovations include skill badging, microcredentials, and certificates. These non-degree credentials are increasingly in demand, where **90% of students agree or strongly agree that earning an entry level professional certificate will increase their employability**⁷ as employers can gain a better understanding of a student's interests and skills, rather than make assumptions about the



7 2023, October 25 "How Microcredentials are Transforming Higher Education." AACSB

knowledge and skills a student learned from their major program, allowing both employers and students to better analyze person-to-job fit. Unfortunately, although over three-quarters of AACSB member business schools offer some type of non-degree program, only 11 percent of member schools reported offering a digital badge or digital certificate.⁸

As a way to assess the career-relevance of curriculum, institutions can also conduct regular strategic program reviews in which they compare learning outcomes of majors and programs to job posting data from workforce data sources like the Burning Glass Institute. In this way, faculty can still maintain academic freedom around their curriculum while having it informed by real time data and systematic analyses.

Incorporate career learning opportunities into curriculum

Among the multiple impacts that the pandemic had on students, professional preparedness and understanding professional norms were often lost as students conducted school and work virtually as they could not observe the unspoken norms of the work world. Managers from the focus group cited gaps in recent graduates' difficulty **navigating workplace norms such as wearing inappropriate attire, watching social media during meetings, communicating poorly, and lacking accountability of their work.** Recent graduates in the focus groups cited a difficulty understanding workplace norms in different settings and the appropriate times to speak up in meetings or contact supervisors. This is consistent with recent studies where employers report **60% of their recent hires are frequently late to work and often miss assignment deadlines** and that 62% of employers stated that difficulty adapting to workplace norms is the primary reason why many recent graduates are unprepared for the workforce.⁹

To address this, higher education institutions can incorporate career readiness goals across the student lifecycle. This might include co-curricular experiences such as professional development seminars that teach topics such as email communication, presentation skills (and other professional communication), professional etiquette, workplace attire, and identifying workplace norms. It is also important to teach students how to translate to the workplace the skills they learn in their

extra-curricular experiences, such as in clubs, athletics, and Greek life.

From an academic perspective, career bridging experiences that incorporate internships or jobs into the broader curriculum are also important.

Northeastern University's Cooperative Education program allows students extended work experiences that build career readiness while they are still in college. The program allows students to **alternate between semesters of academic study and full-time employment in positions related to their interests.**

Co-op programs work well in academic programs designed to dedicate a significant number of credit hours to the co-op experience and are well suited to students confident in their field of interest. A smaller scale option can be an internship-for-credit program where students apply classroom learning directly to the workplace. Quinnipiac University (QU) has implemented such a program and is a required course for graduation in the accelerated undergraduate and MBA programs. It is designed to integrate real-life work experiences with academic learning. This combination allows students to analyze and understand the practical applications of their classroom knowledge and to adapt in real time during their internships.

Internships are high stakes for students as employers increasingly use internship programs for their full-time hiring pipeline. Students need to be career-ready heading into their internships to be successful in landing that first destination job. This trend is no surprise: the internship is a trial run not just for students to test the waters of a particular career or industry, but also an extended opportunity for employers to get to know the potential of a prospective full-time hire.

Job shadowing and micro internships are, therefore, important approaches to bridge school and career. Especially for undergraduate students unsure of their specific career interests (or even major), these are helpful, low-risk opportunities that provide important insights into workplace norms and facilitate helpful knowledge about what is involved in specific jobs or career paths.

Micro internships and course-based applied project work with real-world clients, such as the digital product management course at Columbia's School of Business,

8 AACSB International, 2023-24 Business School Questionnaire, Programs Module

9 2023, December 12 "Nearly 4 in 10 employers avoid hiring recent college grads in favor of older workers", Intelligent

give students hand-on experiences that hone technical skills and develop the skills at the heart of the skills gap: **navigating ambiguity, communication skills, and responding to and applying feedback.** Additionally, and more broadly across curricula, students can benefit from pedagogies that include feedback loops and real-world applications that are hands-on, market facing, and simulate dynamic features of the workplace.

The role of employers

Establish channels to share data and trends on skills

Employers must play a key role in building and sustaining dynamic partnerships so that higher education institutions are equipped with the data and information to design curriculum and educational opportunities accordingly. As good business practice, **most large employers utilize proprietary data and analytics in talent review and planning, with long range projections of the skills needed in their workforce.** Employers should consider entering into partnerships with higher education institutions to share their predictions on skills required and expectations of students once they come into the workforce. This transparency and free transfer of information embraces academic freedom while enabling faculty to have the knowledge needed to better align curricula with industry needs.

Co-create degree programs and institutes

One such opportunity is that employers can collaborate with higher education institutions to establish degree programs, research arms, or even individual classes that reflect the skills needed for success in the workplace. One such example of this collaboration is **Deloitte's Institute for Research and Practice in Analytics at the University of Miami's Herbert Business School.** The Institute is designed to bring together Deloitte and other employers (Citi, FedEx, Visa, to name a few), students, and faculty from across the University in a cross-disciplinary effort to better understand the business and analytics needs, challenges, and opportunities for industry and community organizations across the globe. This includes working together to design new curriculum, pairing high achieving students (Deloitte Scholars) with professionals in Deloitte's Analytics practice, and hosting workshops on current and emerging trends and tools in the Analytics world.

Partner with faculty on coursework

At a more individualized level, organizations can partner with faculty on the real-world application of their curriculum. These partnerships should go beyond just having guest speakers from the public and private sector. On a curricular level, industry leaders can partner with faculty to co-create (or even co-teach) courses or class sessions. In this complementary approach, employers bring **expertise on the skills needed in the workforce, provide research, and help develop real-world examples, exercises, and case studies.** This deeper partnership allows students to learn the theory and practice it in real-time.

Beyond curriculum, employers can be embedded throughout the semester as mentors **who provide real-time feedback to students on their work, pose strong and sometimes difficult questions,** or be advisors for students on larger projects like Capstone Projects. By embedding employers into courses, they can create opportunities for students to receive feedback from someone with an external point of view and provide space for them to learn how to adapt to that feedback.



Conduct research and develop products that regularly report on the labor market

Finally, industry associations and chambers of commerce can provide important opportunities to identify skills gaps and insights on how to close them. Given that these organizations have a more global view of what is happening in the market, they can create products like skills gap polling, focus groups, or surveys that are regularly released for employers and higher education institutions alike to understand "hot skills" needs and where skills gaps may occur.

The role of students

Students must play an active role in their own career preparedness in and outside of their college and university experience as they are the primary drivers of their own professional and human development. As each student is different, they must be active in tailoring their college experience to align with their goals. They **should accept personal responsibility to engage with their coursework, seek mentorship from faculty and industry professionals, and participate in co-curricular and extracurricular activities** that build relevant skills and experiences. College and graduate school come at important inflection points in life and are environments to build resilience and skills for life. Students should actively seek out opportunities for feedback and accept failure not as failure, but as a chance to grow and learn. As the world of work is defined by continuous change, students must take the initiative to learn about industries and jobs and how they are changing due to technological, economic, and societal factors. Such a proactive approach can enable students to not only emerge stronger and more adaptive in the workforce but also thrive regardless of how the labor market changes.

Balancing academic demands with internships, co-op programs, and industry projects require students to develop effective time management skills and

set realistic goals to avoid burnout. Practicing this during their academic experience will allow them to build the critical skills that will allow them to balance the demands of work with the demands of life when they reach the working world. Campus mental health services, mentors, and peer groups can provide valuable guidance and emotional support. Additionally, students should cultivate a growth mindset, embracing challenges as opportunities for learning rather than sources of stress. By proactively managing their mental health, students can sustain their wellbeing and maximize their potential in both academic and professional pursuits.

What we can do collectively

The partnership between higher education, employers, and students must become more vibrant and dynamic if we are going to effectively address the skills gap. We must work together to share information **on market and skills trends to align curricula with current and future demands of the labor market**. These partnerships can be formal or informal in nature and must also look beyond the traditional duration of a degree. By promoting a culture of lifelong learning and professional development, higher education institutions and employers can help students and employees adapt to the evolving needs and challenges of the workforce and maintain their employability and competitiveness. With change being the nature of work for the foreseeable future, it means that lifelong learning and continuous professional development are critical. By partnering dynamically, employers and higher education institutions can delineate between what is best taught on campus, and what is best taught as on-the-job training. This can include flexible degree pathways that might include time spent at an employer, or partnerships where employees can access courses to help them prepare for the next step in their careers.

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