The Partnership Imperative:
Community Colleges, Employers, and America's Chronic Skills Gap

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Managing the Future of Work

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Executive summary

The nature of work has changed dramatically across industries in the last few decades due to rapid and repeated waves of automation. Nowhere is this more evident than in middle-skills positions—those that require less than a four-year college degree but more than a high school diploma. America's community colleges have been, and should remain, the education portal through which these workers pass. But increasingly, the ecosystem is in imbalance due to the growing gulf between those who teach and those who hire. Both educators and employers are failing to meet the challenge of the moment: how to create a steady pipeline of workers required to keep the U.S. economy competitive and prospering.

Employers complain they cannot find the talent they need—in terms of quantity, quality, and diversity. Critical middle-skills positions go unfilled. Revenues are lost, and customers are dissatisfied. Costs mount with overtime and turnover, and morale declines due to overwork.

At the same time, some students come out of the community college system only to find that they are unemployable in their field of study or at a living wage. Employers do not find them "workforce ready" and capable of carrying out the more sophisticated technology-promoted tasks associated with middle-skills positions. Too often armed with outdated credentials and burdened with student debt, these graduates discover that they lack the technical and foundational skills needed to secure positions to which they had aspired.

For their part, educators struggle to get employers engaged—in curriculum development; in gaining access to information on how technical and foundational skills for middle-skills positions are changing; in attracting skilled advisers and faculty members to serve at community colleges; and in acquiring the latest equipment and software licenses. Educators also face high hurdles when seeking internships and apprenticeships from local businesses. Real-life work-based learning experiences for community college students are rarely available and often unpaid.

The net result is a middle-skills environment in disequilibrium, underserving the needs of aspiring workers, employers, and ultimately, communities.

In order to diagnose the malaise afflicting the ecosystem, Harvard Business School's Project on Managing the Future of Work launched a multiyear, multi-method research initiative. It included extensive background research, as well as interviews with community colleges across the country—urban, rural, and suburban—and with a large number of businesses of various sizes and from different industries and regions. The Project then partnered with the American Association of Community Colleges (AACC) to conduct the first-ever extensive survey into the state and trajectory of the partnership between community college leaders (educators) and

Sidebar I: Framework for areas of collaboration between community colleges and employers

GOAL 1	GOAL 2	GOAL 3
Partner with each other to offer training and education that is aligned with industry needs	**Establish relationships with each other that result in the recruitment and hiring of students and graduates**	**Make supply and demand decisions that are informed by the latest data and trends**
STRATEGIES		
Co-create and regularly update college curriculum around relevant technical and foundational skills based on industry needs	**Dedicate staff time toward managing employer-college relationships**	**Collect and share data on the local supply for talent**
Co-design programs that fit with students' lives and industry hiring cycles	**Create processes for hiring community college students and graduates**	**Collect and share data on the local demand for talent**
Incorporate classroom experiences that simulate real-world settings and scenarios	**Develop commitments for hiring and recruitment**	**Build mechanisms to jointly monitor and improve the supply and demand for talent**

senior executives across industries (employers). The survey was constructed around a framework for collaboration that included three fundamental goals for partnership along with three strategies each for achieving those goals. (See Sidebar I on page 4.) The survey also presented business and community college leaders with a comprehensive list of actions to execute the nine strategies. (See Sidebar II on pages 7-9.) The survey findings revealed sobering results:

Educators

- America's community college leaders voiced their disappointment with the level of collaboration with employers. While grading employers, 93% of surveyed community college leaders gave employers a "B" grade or lower. Only 7% of community colleges gave employers an "A" grade, a rating of "very satisfied." By contrast, 28% of employers gave themselves an "A" grade.

- Educators work to bridge the knowledge gap and prepare students who are workforce ready, but these efforts are not adequate and fall short of employers' expectations. When asked to respond to the statement, "My college is producing the work-ready graduates that employers need," only 21% of community college leaders "strongly agreed," and another 59% more cautiously "agreed."

- As de facto "suppliers" to local and regional businesses, community colleges are hugely constrained in their ability to compel their "customers" to respond to problems they face in providing service. Only 11% of community college leaders believed that their local employers' were willing to set hiring targets, and only 10% believed employers would offer job guarantees to students who completed a program.

- They found that most employers are primarily interested in programs tightly tailored to their own specific needs.

- To improve their performance materially, community colleges require far more engagement from employers, but they have come to accept employers' ambivalent engagement. Community college leaders have low expectations for more substantive collaboration. Out of a list of more than 40 actions for collaboration, they were least likely to take action pertaining to student job placement.

- Small efforts and small successes in business engagement are credited as victories, as community college leaders consistently give employers high marks for modest actions.

Employers

- While 84% of business leaders surveyed claimed their organization hired community college graduates, the survey revealed that, in reality, employers do not perceive America's community colleges as the most efficient or effective way to acquire middle-skills talent. To the statement, "Community colleges are producing the work-ready employees that my company needs," only 26% of employers surveyed "strongly agreed," while 36% "agreed."

- Businesses recognize that their engagement is critical for creating a workforce of the future but expect educators to initiate efforts to bridge the gaps, despite the obvious imbalance in convening power between them.

- They systematically under-invest in their relationships with community colleges. When presented with a list of more than 40 actions for collaboration, there was no action that more than 60% of employers implemented. By contrast, community college leaders cited 32 actions that 75% to 100% of educators surveyed confirmed their institution was taking the action to promote collaboration with employers.

- Underpinning that low engagement is their belief that talent can be readily found in the open or "spot" market. Investing time and effort partnering with community colleges is not seen as easy or efficient. Only one in four employers could claim that they were transparent in communicating their hiring needs to educators.

- Further, business leaders believe community colleges are resistant to curriculum change. As high as 43% of all employers surveyed agreed with the statement, "My community college lacks the mandate or culture to develop programs that align with what employers are looking for." In holding such beliefs, employers fail to recognize the challenges of accelerating technological change on the ability of community colleges to provide state-of-the-art instruction.

- They prove to be generally unwilling to provide community colleges with the resources necessary to stay abreast of such developments, often presenting educators with major new requirements that are in immediate demand. As many as 47% of employers surveyed believed it was more cost-effective to hire talent from the open market rather than invest in training new talent. Only 22% of employers disagreed.

Educators and employers

- Community college leaders and business leaders value the partnership to produce a pipeline of workforce-ready students quite differently: 98% of educators surveyed believed a partnership between the two was "very important," compared to 59% of employers.

- Educators and employers countenance each other's weaknesses. While grading employers on the state

of collaboration with educators, 93% of surveyed community college leaders gave employers a "B" grade or lower. Only 7% of community colleges gave employers an "A" grade, a rating of "very satisfied."

- Neither collects, analyzes, or exchanges relevant data to assess the system's performance—the bedrock of a continuous quality-improvement routine. For example, when asked what percentage of their student body are incumbent workers, 64% of community college leaders said, "I don't know." One out of three business leaders surveyed believed it was not worth their time and effort to collect specific data on community college recruiting.

- Employers regularly insulate their senior management from the leadership of community colleges. Partnerships based on a direct relationship between the senior executives of the two institutions and, specifically, the respective chief executives are rare. Nearly half of employers surveyed believed community colleges lack the leadership to create the workforce of the future and the staff to maintain strong employer relationships.

- Oversight of the relationship between employers and educators is often vested in functional managers, such as Chief Human Resources Officers or hiring managers. That relegates the discussion of how to improve performance to tactical and procedural matters. Human resources professionals, however well-meaning, generally do not have a real-time command of the changing skills requirements. Just over 50% of business leaders surveyed were unable to assert that they knew which skills they were hiring for; 30% flatly admitted that they did not know which skills they were looking for in new hires.

- While there is ample conversation between the two entities, it is seldom focused on the substantive challenges that undermine the performance of their collaboration. A lack of a reciprocal understanding of the needs and constraints of the two potential partners leads to an inability to find common ground. For example, a majority of employers, 51%, endorsed the notion that students should be paid for work-based learning experiences. Only 39% of community college leaders had confidence that employers were willing to pay students in such programs.

Employers' approach to collaborating with educators reflected a self-fulfilling prophecy. Employers expected only a marginal return on their investment in the relationship with community colleges, so they capped the investment and, thus, guaranteed themselves a marginal return.

This current relationship between employers and community colleges is likely to labor under further duress. Community colleges face a series of challenges.

One concerns enrollment. An absolute decline in the population of potential students due to demographic changes has begun. Students, increasingly skeptical of the value of post-secondary degrees, anxious about incurring debt, and attracted to the wages currently available in a tight labor market are enrolling at declining rates. States, while currently awash in federal stimulus funding, have been consistently reducing support of higher education systems.

Employers, confronting a tight labor market, are investing in more-advanced technologies in order to boost productivity. But adopting new technologies often serves to exacerbate the very skills gap they bemoan, as working with such innovations often requires the higher-order digital and social skills that are in short supply. Having failed to develop talent-management pipelines in collaboration with local educators, they have come to rely on the spot market for labor and contingent work platforms to meet short-term needs. But such devices for sourcing talent are inherently limited. Employers in regions with aging or declining populations cannot rely on simply outbidding other companies for talent, especially in an era of declining geographic mobility by workers. Just-in-time hiring is likely to prove a risky proposition, as more and more employers are searching for candidates with the same skill set.

In sum, the partnership between employers and community colleges is currently not fit for the purpose of creating America's workforce. The depth of the collaboration is inadequate to meet America's needs to equip aspiring workers to fill tomorrow's critical middle-skills jobs, nor to address the widespread decline in living standards affecting too many citizens without college degrees. A failure to address the threat to America's skills base represents a genuine threat to the nation's competitiveness and, ultimately, the standard of living of its people.

But such an outcome is far from inevitable. Rebooting the system that provides America with middle-skills workers is very achievable—and in short order. It requires community college educators and business executives alike to accept that their historical practices need to be substantially overhauled. Businesses need to take the lead in any such effort, given their control over the most relevant currency in this market: jobs. But they can do so out of both a sense of self-interest and in the hope of creating better opportunities for more Americans.

Sidebar II: **Actions for collaboration between community colleges and employers**

GOAL 1 Partner with each other to offer training and education that is aligned with industry needs

STRATEGIES	COMMUNITY COLLEGE ACTIONS	EMPLOYER ACTIONS
Co-create and regularly update college curriculum around relevant technical and foundational skills based on industry needs	Engage employers on industry advisory boards	Engage employers like yours on industry advisory boards
	Engage employers in curriculum design	Provide input to community colleges on curriculum design
	Offer industry-recognized certifications	Support community college efforts to offer industry-recognized certifications
	Offer micro-credentials (e.g., sales, IT support, service excellence)	Support community college efforts to offer micro-credentials (e.g., sales, IT support, service excellence)
	Help students obtain professional licenses	Support community college efforts to help students obtain professional licenses
	Teach foundational skills in the curriculum	Support community college efforts to teach foundational skills in the curriculum
	Teach technical skills in the curriculum	Support community college efforts to teach technical skills in the curriculum
	Offer workplace writing courses	Support community college efforts to offer workplace writing courses
	Offer workplace applied math courses	Support community college efforts to offer workplace applied math courses
	Offer workplace verbal communication courses	Support community college efforts to offer workplace verbal communication courses
	Develop standards for what skills and knowledge students can expect to acquire in their classes	Co-develop standards for what skills and knowledge students can expect to acquire in their community college classes
	Offer English for Speakers of Other Languages (ESOL courses)	Support community college efforts to offer English for Speakers of Other Languages (ESOL courses)
	Offer English for Speakers of Other Languages (ESOL courses) aligned with specific professions or industries	
Co-design programs that fit with students' lives and industry hiring cycles	Offer programs to help workers currently in the workforce upgrade their skills	Send current workers to upgrade their skills at community colleges
	Offer customized programs for companies' employees	Work with community colleges to offer customized programs for company employees
	Develop program calendars that are convenient for employers and learners (e.g., weekend classes, nighttime courses)	Support community college efforts to develop program calendars that are most convenient for employers and learners (e.g., weekend classes, nighttime courses)
	Offer credit for students' prior knowledge	[Question not asked of employers due to lack of relevance]
	Offer credit for students' prior work experience	[Question not asked of employers due to lack of relevance]
Incorporate classroom experiences that simulate real-world settings and scenarios	Source industry practitioners to teach community college courses	Offer industry practitioners to teach community college courses
	Offer job-site visits for community college students	Offer job-site visits for community college students
	Source projects that reflect real-world work from employers for community college class curriculum	Offer class projects that mimic real-world work for community college courses
	Offer non-credit-bearing experiential learning opportunities (e.g., volunteer, job shadowing, internship opportunities)	Support community college efforts to offer non-credit bearing experiential learning opportunities (e.g., volunteer, job shadowing, internship opportunities)
	Offer credit-bearing experiential learning opportunities (e.g., for-credit co-op programs, for-credit apprenticeship programs)	Support community college efforts to offer credit-bearing experiential learning opportunities (e.g., for-credit co-op programs, for-credit apprenticeship programs)
	Enlist industry practitioners to train community college instructors (utilize "train the trainer" models)	Enlist industry practitioners to train community college instructors (utilize "train the trainer" models)
	Solicit donated or leased equipment or software licenses from employers	Donate or lease equipment or license software to community colleges
	Create work-based or learn-and-earn opportunities	Create work-based or learn-and-earn opportunities for community college students

GOAL 2	Establish relationships with each other that result in the recruitment and hiring of students and graduates	
STRATEGIES	**COMMUNITY COLLEGE ACTIONS**	**EMPLOYER ACTIONS**
Dedicate staff time toward managing college-employer relationships	Assign a team or individual to manage community college-employer partnerships	Assign a team or individual to manage community college-employer partnerships
	Establish partnerships for employers to recruit and hire from your community college	Establish partnerships for employers to recruit and hire from community colleges
	Partner with employers where your graduates work	Partner with community colleges that your employees come from
	Encourage community college faculty to build relationships with recruiters and hiring managers	Encourage recruiters and hiring managers to build relationships with community college faculty
Create processes for hiring community college students and graduates	Deploy technology to facilitate contact between community colleges and employers (e.g., Handshake, Salesforce, etc.)	Deploy technology to facilitate contact between community colleges and employers (e.g., Handshake, Salesforce, etc.)
	Offer in-person or virtual sessions for community college students to meet with recruiters and hiring managers	Offer in-person or virtual sessions for community college students to meet with recruiters and hiring managers
	Work with employers to establish policies, recruiting calendars, standard procedures, and/or hiring best practices	Work with community colleges to establish policies, recruiting calendars, standard procedures, and/or hiring best practices
	Offer career services (resume/cover letter writing, job-search fundamentals)	Support community college efforts to offer career-building support services (resume/cover letter writing, job-search fundamentals)
Develop commitments for hiring and recruitment	Commit to job guarantees for community college graduates (employer commitments to hire a fixed number of students per cycle)	Commit to job guarantees for community college graduates (employer commitments to hire a fixed number of students per cycle)
	Commit to hiring targets for community college graduates (employer commitments to hire an approximate number of students per cycle)	Commit to hiring targets for community college graduates (employer commitments to hire an approximate number of students per cycle)
	Establish employer-funded scholarship programs for community college students	Establish employer-funded scholarship programs for community college students
	Solicit employment opportunities for community college-wide job boards	Post employment opportunities on community college-wide job boards
	Solicit employment opportunities on academic department-specific job boards	Post employment opportunities on academic department-specific job boards
	Co-design marketing campaigns with employers to attract students to community college programs	Co-design marketing campaigns with community college to attract students to programs

GOAL 3 Make supply and demand decisions that are informed by the latest data and trends

STRATEGIES	COMMUNITY COLLEGE ACTIONS	EMPLOYER ACTIONS
Collect and share data on the local supply for talent	Collect and monitor data on local demographic trends	Collect and monitor data on local demographic trends
	Seek feedback from employers on your community college as a partner (at least once per year)	Seek feedback from community college leaders on your company as a partner (at least once per year)
	Survey community college graduates on their experience at their company (at least once per year)	Survey employees who attended community college on their experience at your company (at least once per year)
Collect and share data on the local demand for talent	Survey employers on their workforce needs (at least once per year)	Survey the local community on its workforce needs (at least once per year)
	Track the local community on its workforce needs (at least once per year)	
	Track data on job/industry trends (e.g., job/earnings growth)	Track data on industry trends (e.g., changing nature of jobs in your industry)
		Track the retention rates of employees who attended community college
Build mechanisms to jointly monitor and improve the supply and demand for talent	Use job placement rate as part of your community college's outcome metrics	[Question not asked of employers due to lack of relevance]
	Use graduate wages as part of your community college's outcome metrics	[Question not asked of employers due to lack of relevance]
	Prioritize job placement rate over graduation rate as a community college outcome metric	[Question not asked of employers due to lack of relevance]
	Embed workforce development objectives into your community college's strategic plan	[Question not asked of employers due to lack of relevance]
	Counsel students to enroll in programs with the highest labor market demand	Support community college efforts to counsel students to enroll in programs with the highest labor market demand

A challenging moment

Historically, America's community colleges have contributed significantly to the nation's economic prosperity. For over a century[1], America's network of 1,043 community colleges have been an essential institution of higher learning that is local and accessible to both workers and employers.[2] Of the 26.1 million students who pursued a post-secondary education in 2019, nearly 8 million—approximately 30%—attended public two-year community colleges.[3] Of these, 65% attended part time, and 72% worked while enrolled.[4]

By one estimate, community colleges provide training for the 15.7 million "good" jobs—or 24%—of the nation's middle-skills jobs that require more than a high school diploma but less than a bachelor's degree, and offer wages higher than $45,000 a year.[5]

With offerings ranging from short-term certificates in emergency medical services to two-year programs in fields such as information technology and healthcare, they prepare a pipeline of millions of workers required to keep America's economy humming. Despite the popular fixation on America's four-year colleges, only 38% of American adults over the age of 25 have at least a bachelor's degree;[6] a further 25% of Americans hold associate's degrees or some college.[7]

Often within a short commute for many Americans,[8] community colleges have provided pathways into the middle class for people from urban, rural, and suburban neighborhoods. (See Figure 1.) Priced at $3,800 per year on average—65% lower than the annual tuition of the average four-year college program[9]—community colleges offer learners access to a faster and more affordable means of acquiring a professional credential and embarking on a career across different industries.

Community colleges have rightly prided themselves on the diversity of their students. They have been an economic lifeline for many in underserved communities, providing access to education to low- and middle-income workers, as well as people who are not of traditional college age. Over half of America's community college students are non-white, nearly one-third are the first in their families to attend college, and 44% are over the age of 22.[10] (See Figure 2.)

For all their remarkable achievements, however, America's community colleges are facing unprecedented challenges. They have been swept up by the forces of change that have transformed the U.S. economy in the past few decades—rapid technological advances, the emergence of new business models, the changing

Figure 1: Snapshot of America's community colleges (2022)

There are 1,043 community colleges in total

90% Public
3% Tribal
7% Independent
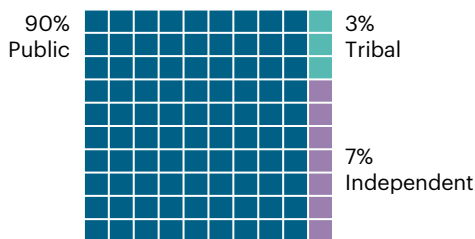
Only 38 percent of American adults have bachelor's degree or above (adults 25+, 2022)

9% Less than a high school diploma or equivalent
28% High school graduate
11% Associate's degree
15% Some college no degree
38% Bachelor's degree or higher
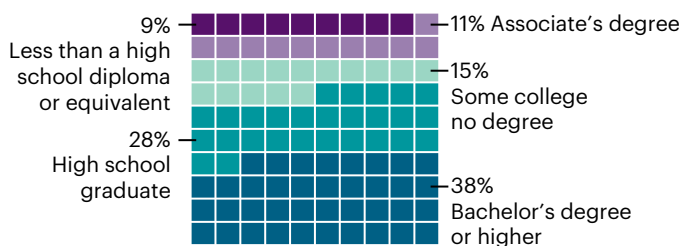
Total headcount enrollment 10.3 million

40% Non-credit
60% Credit
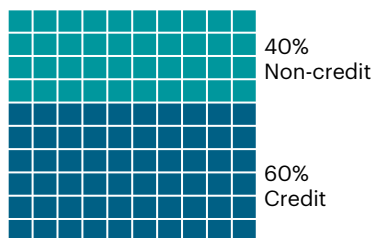
56% are students of color

65% attend part-time

29% are the first in their families to attend collage

44% are over 22 years old

Source: Fast Facts 2022, American Association of Community Colleges, 2022. https://www.aacc.nche.edu/wp-content/up-loads/2022/05/AACC_2022_Fact_Sheet-Rev-5-11-22.pdf.
Census Bureau Release New Educational Attainment Data, United States Census Bureau, 24 Feb 2022.

Figure 2: **Characteristics of community college and four-year college students, 2015–16**

	Community colleges	Four-year colleges
Under-represented minority	43%	34%
First-generation college	35%	21%
Single parent	16%	8%
Working	68%	61%
Enrolled part-time	76%	46%

Source: National Postsecondary Student Aid Survey, 2015-16, https://nces.ed.gov/pubs2018/2018466.pdf.

nature of occupations, and social and demographic transitions. Those changes are making it progressively harder to prepare workforce-ready talent. The goal-posts simply keep moving faster than our traditional skills-development system can respond. The biggest challenge lies in creating a system that can consistently strike a rough balance between the supply and demand for workers with relevant skills across U.S. industries.

America's growing labor woes

The challenge is too big for America's community colleges to solve on their own. Well before the COVID-19 pandemic, America was dealing with a talent crisis, one whose genesis lay outside of the community college system. As automation swept across industries at an unprecedented rate since the late 1990s, it exacerbated the imbalance in the supply and demand for middle-skills talent. Across industries, employers automated many traditional routine tasks. Over time, as machines and technology improved, they also facilitated the movement of jobs overseas. Such changes combined to cause many middle-skills jobs to disappear in the U.S.[11]

Gaps between supply and demand of talent began growing. The skills of the displaced workers did not match those required to transition to the emerging middle-skills jobs. Businesses, required to move at the speed of markets, found it hard to keep up. Academic institutions, burdened with everything from aging facilities to tenured faculty, found it impossible to match the pace. Even though an occupation retained its historical name, the composition of the job and, hence, employers' requirements changed in lock step. Familiar middle-skills positions were "hybridized" with digital technologies.[12] They became more complex. Incumbent workers were often able to retain such jobs, since employers provided on-the-job training in newly deployed technologies. But they had the benefits of familiarity with the core phenomena involved, the technology that remained in service, and the policies, procedures, and cultures of their organizations. Aspiring workers face a bigger challenge fulfilling the new breadth of work requirements. In addition to requiring "technical" skills and credentials, more middle-skills jobs involved additional hard skills—such as data analysis and facility using networked devices—as well as deeper professional or social skills—such as spontaneous communications and the ability to work in unfamiliar circumstances. The combinations of skills sought were both new to fields traditionally taught in community colleges and represented combinations of skills not historically taught together.[13]

Of course, all of this happened imperceptibly and at a different pace across industries. Employers, eager to fill positions quickly, focused on making necessary changes to job descriptions. Most did not, however, invest in communicating those changes to educators. Indeed, historically, there had been little need to coordinate changing job requirements to skills providers, since the rate of innovation had been more manageable. In recent decades, though, it was apparent that the pace of change was outstripping the ability of educators to adapt to the changes—especially in the absence of any meaningful partnership or collaboration with local employers. The proliferation of alternative skills providers, ranging from boot camps and online schools to gig work platforms, reflected the inability of traditional systems to keep up with emerging demand. The pattern played out across industries—retail, food services, healthcare, transportation, and warehousing—and across occupations that were often trained by community colleges—technicians, equipment repairers, technologists, paralegals, support specialists, sales specialists, healthcare assistants, and network support specialists.

The growth of hybrid jobs deepened the chasm between supply and demand of middle-skills talent. According to one pre-COVID-19 estimate by the Bureau of Labor Statistics, the top 10 middle-skills occupations for which job openings were expected to surge between 2019 and 2029 were: truck drivers; nursing assistants; bookkeeping, accounting, and auditing clerks; teaching assistants; medical assistants; cosmetologists and hairdressers; automotive technicians and mechanics; licensed vocational nurses; computer support specialists; and pre-school teachers.[14] Many of these positions were—and remain—ideally suited to community colleges. But many employers claimed that community college graduates lacked the specific skills and capabilities they require. As we shall see through our survey results, over time, the reputation of community colleges in the eyes of employers suffered.

Worse, when employers did not find enough employees with the new skills and competencies required to tackle more-complex tasks, they responded in two ways. They relied on even more automation to fill the human capabilities gap; and in the case of many middle-skills positions, they began demanding a four-year college degree for positions that previously had not required them.[15] (See Figure 3.) Both responses further compounded the burgeoning middle-skills labor shortage.

A system falling short of its potential

Despite advantages like affordability and physical proximity, community colleges have often struggled to keep up with the supply of both the quantity and composition of talent demanded by America's employers. Timely degree completion has also proved to be a challenge. Only 34% of students enrolled in community colleges complete their two-year associate's degree programs within three years[16]; only about 62% of students graduate within six years.[17] The outcomes for the 65% of students who attend part time are even more dispiriting. By one estimate, by the six-year mark, 68% of part-time students drop out. Only 19% graduate from the community college at which they started; 11% will still be enrolled.[18] The poor outcomes disproportionately affect students by race: Only 23% of Black first-time, full-time community college students attain a degree within three years, compared to 27% of American Indian/Alaska Native students, 30% of Hispanic students, 32% of white students, and 36% of Asian students.[19]

Community college students who aspire to transfer to a four-year institution at the conclusion of their two-year program do not fare much better. Of the 77% of community college attendees who expect to attain a bachelor's degree, only 13% will eventually realize

Figure 3: **Demand for educational attainment in jobs, 1973–2020**
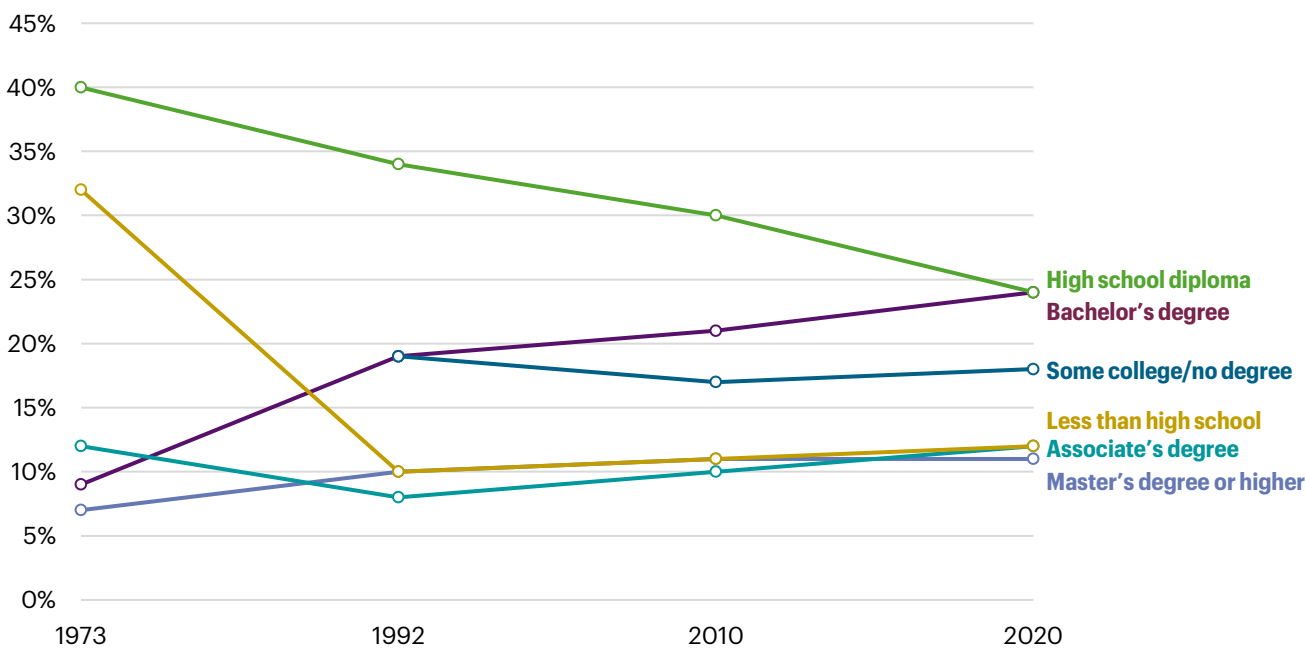
Note: Data after 2010 reflect authors' projections.

Source: "Recovery: Job Growth and Education Requirements Through 2020," Anthony P. Carnevale, Nicole Smith, Jeff Strohl, Georgetown Public Policy Institute Center on Education and the Workforce, 2013. https://cew.georgetown.edu/cew-reports/recovery-job-growth-and-education-requirements-through-2020/

their ambition.[20] Transferring proves to be a difficult process. A student's credits may not be articulable, or transfer students may not be able to apply their credits to fulfill degree requirements in their field of interest.[21] (Such problems were less acute in business and science fields.[22]) Students who begin their higher education journeys at community colleges are 14.5% less likely to obtain a bachelor's degree within nine years than students who enroll in bachelor's degree programs directly.[23]

With the growing hybridization of middle-skills occupations, community college students also face another challenge: Increasingly, the choice of school and program matters. An Associate of Arts (AA) degree in liberal arts or general studies leads to earnings gains that are only marginally higher than that a student can expect with a high school diploma but significantly less than an associate's degree within a technical field.[24]

Two-year degree holders, like their four-year degree counterparts, enjoy an earnings premium over those who only possess a high school diploma. Yet the advantage enjoyed by two-year graduates has been shrinking steadily. Millennials who hold a four-year degree have seen their earnings premium over high school graduates grow. Millennials who hold a two-year

degree, on the other hand, have seen their earnings premium shrink. (See Figure 4.)

In 2019, 25% of the credentials given by two-year institutions were certificates—credentials that often take only a few months to complete and that do not lead directly to the award of an associate's degree. Many degree and certificate programs alike have proven to be poor pathways to well-paying jobs.[25] Only 25% of certificates and 33% of associate's degrees awarded by community colleges are held by workers with median annual earnings exceeding $35,000.[26]

The long-term implications for some students are profound. While community colleges are meant to be a less expensive pathway to a decent middle-class living, the cost of acquiring an associate's degree has risen at a rate exceeding inflation over the last three decades. (See Figure 5.)

Community college students, even those armed with an associate's degree, find themselves competing against—and often losing to—workers with four-year college degrees. As this research demonstrates, many employers express dissatisfaction with the skills of those who do find work.

Figure 4: **Growing earnings gap between associate's and bachelor's degree holders**

Median annual earnings among full-time workers ages 25–32, in 2012 dollars
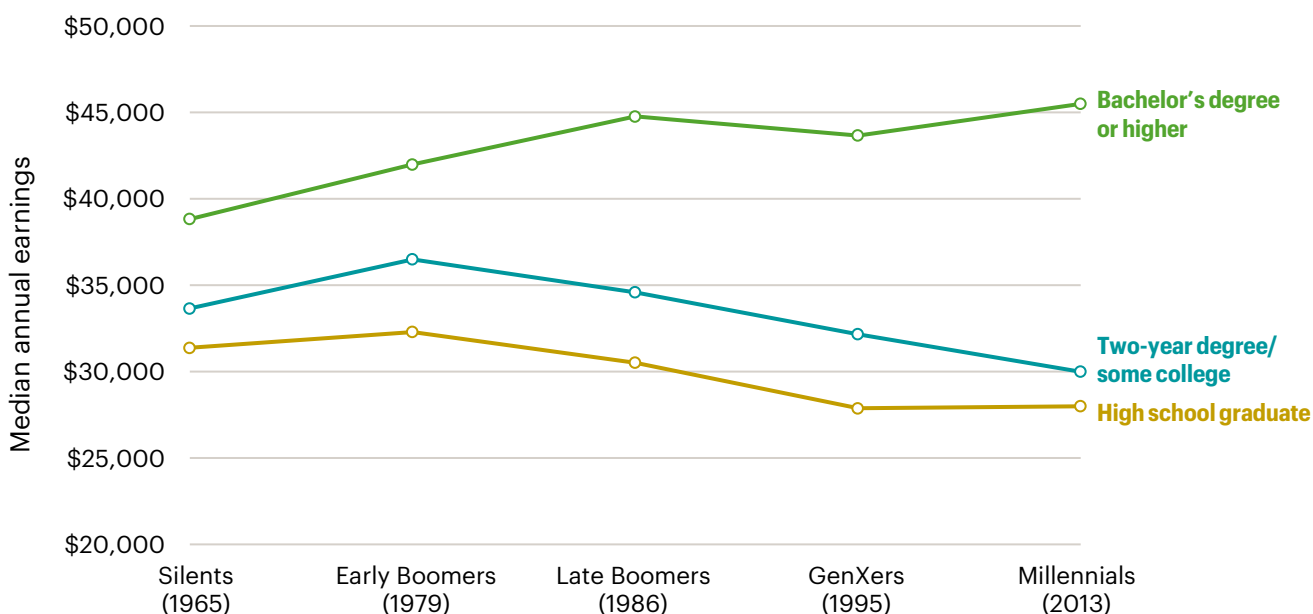
Source: "The Rising Cost of Not Going to College," Pew Research Center, 11 Feb 2014, Centertabulations of 2013, 1995, 1986, 1979, 1965 March Current Population Survey (CPS) Integrated Public Use Micro Samples, https://www.pewresearch.org/social-trends/2014/02/11/the-rising-cost-of-not-going-to-college.

Figure 5: **Tuition and fees versus inflation relative to 1991–1992 by college type, 1991–2021**

Compound annual growth rate

Public Four-Year — 5.4%

Private Four-Year — 4.5%

Public Two-Year — 3.9%

Consumer Price Index — 2.2%

1990   1995   2000   2005   2010   2015   2020
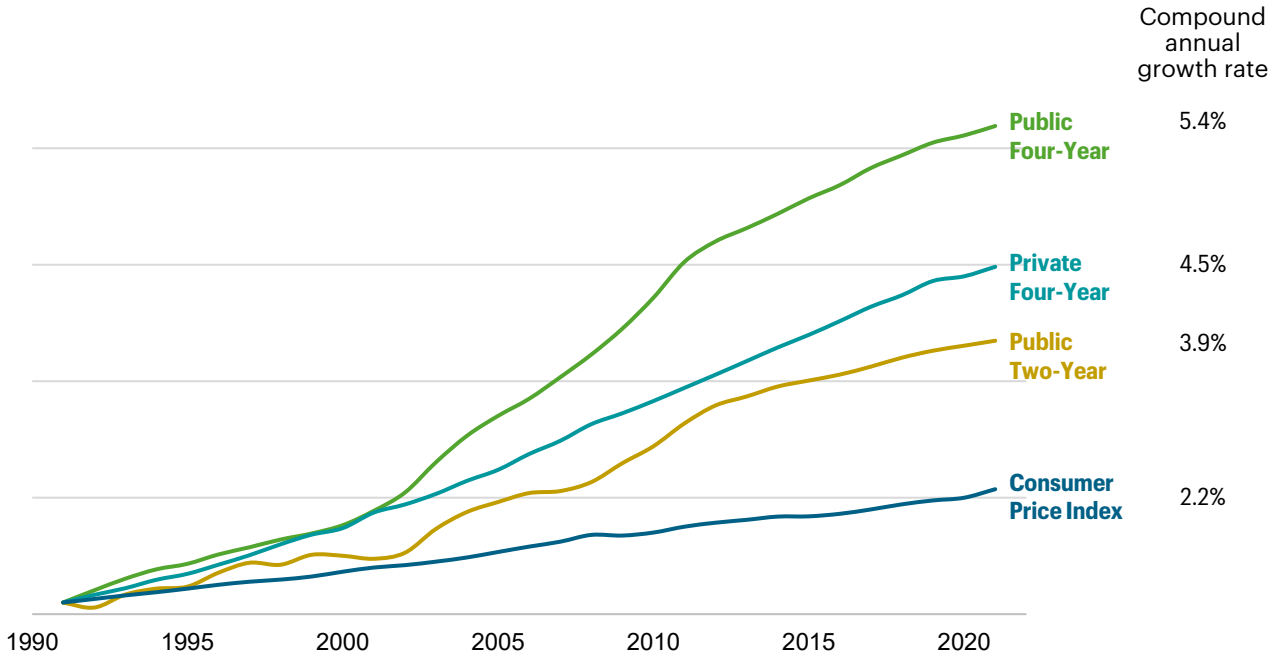
Source: Trends in College Pricing, CollegeBoard, Accessed April 5, 2022, https://research.collegeboard.org/trends/college-pricing

Figure 6: **Enrollment by institution type and gender, 1970–2020**

Enrollment (millions)

Four-year institutions females

Four-year institutions males

Two-year institutions females

Two-year institutions males

1970   1980   1990   2000   2010   2020
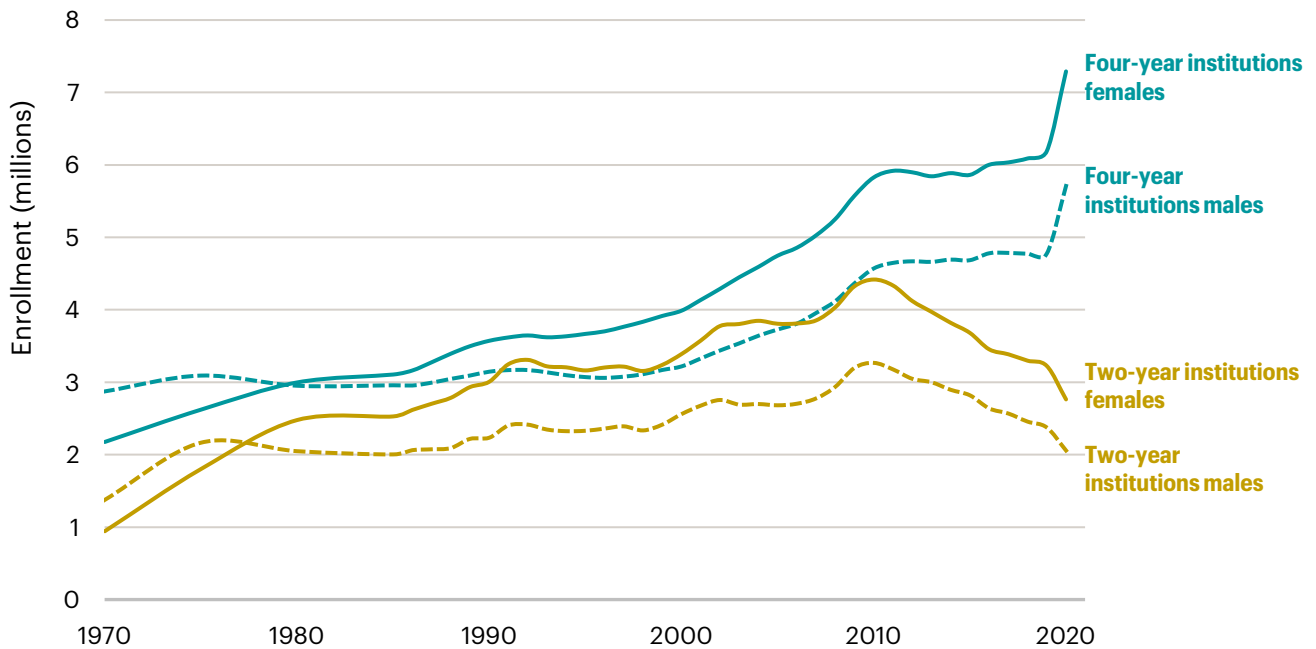
Source: Total undergraduate fall enrollment in degree-granting postsecondary institutions, by attendance status, sex of student, and control and level of institution: Selected years, 1970 through 2029, National Center for Education Statistics, https://nces.ed.gov/programs/digest/d20/tables/dt20_303.70.asp

These factors have contributed to a recent fall in enrollment at community colleges. A decline in the absolute number of young people of college age accounts for some of that decline. (See Figure 6.) However, the uncertain economic prospects community college graduates have faced will have eroded students' confidence in the value of an associate's degree. That confidence will be further eroded by the risk of defaulting on student loans. Though students at two and four-year private institutions have relatively similar default rates, attendees at public associate's degree programs default on their loans at a rate of 36%, compared to 21% for students of public four-year institutions.[27]

Complications due to COVID-19

Typically, economic downturns are countercyclical to college enrollments. More workers turn to a college education when unemployment is high.[28] However, that was not true of the downturn resulting from COVID-19. With the onset of the pandemic, enrollments at public community colleges in spring 2021 declined by 9.5%, an enrollment drop fifteen times as large as that experienced by public four-year colleges.[29] (See Figure 7.) While multiple factors contributed—ranging from the shift to remote learning, the digital divide, and the high percentage of community college students who are "working learners"—the decline in enrollment, when combined with the shrinking pool of potential applicants, has troubling implications for the viability of some community colleges, as well as the range of programs they offer.

Students from underrepresented and marginalized backgrounds were disproportionately affected by the COVID-19 pandemic. As community college enrollment plunged, students' basic cost of living increased. In fact, a Chronicle of Higher Education survey found that 39% of students from two-year institutions reported experiencing food insecurity, 52% experienced housing insecurity, and 14% had been homeless.[30]

Figure 7: **Percentage change in enrollment from previous year by institution type, 2018–2022**
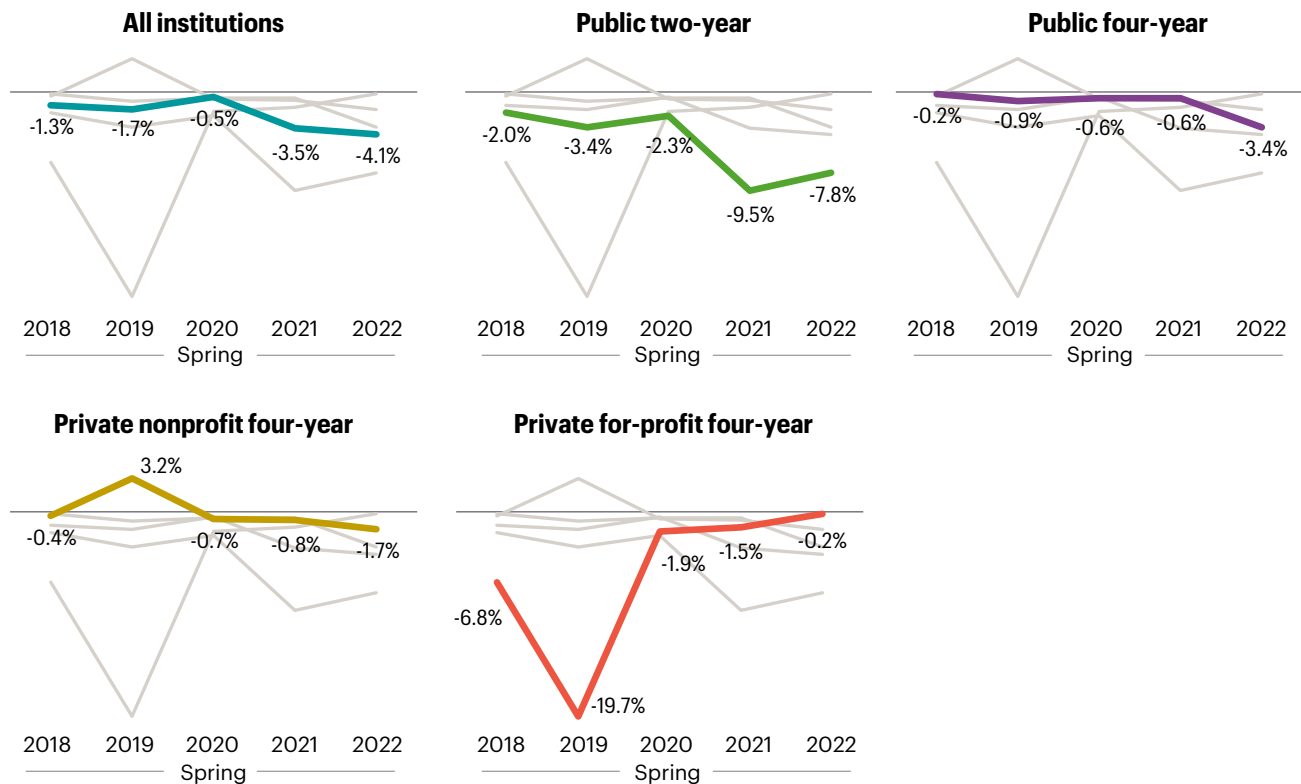
The critical need for partnership

As the economy emerges from the shadows of COVID-19, America's middle-skills shortage is front and center as an urgent issue. Across industries, the inability to fill positions is preventing companies from delivering their goods and services to consumers. Airlines are canceling flights, warehouses are delaying shipments, the hospitality industry is not able to meet demand, healthcare services are strained—the examples are common knowledge. At the same time, millions of Americans who have earned degrees or certificates at community colleges are deemed either unemployable or unqualified for work in their field of study by employers. Educators and employers have not had adequate communication for decades—and the gap between the supply and demand for middle-skills talent continues to grow. It is an increasingly urgent necessity that the American system for grooming middle-skills talent be rejuvenated. The question is: How much effort is required, in which areas, and who needs to take the first step?

About this research

To answer these questions, in early 2020, Harvard Business School's Project on Managing the Future of Work partnered with the American Association of Community Colleges (AACC) to measure the state of collaboration between employers and community colleges. The focus of the research effort was to explore the extent and nature of collaboration between America's community colleges and employers, in order to produce a "work-ready workforce."

The key words were "collaboration for a work-ready workforce," such that the supply of talent matched the demand for talent. Thus the research started by laying out first what success looks like: educators and employers collaborating in such a way that the students graduating from America's community colleges had the necessary *technical skills* (the ability to perform specific tasks in a job such as welding, soldering, medical sonography, etc.) and *foundational skills* (the ability to work effectively in terms of teamwork, communications, problem solving, work ethic, time management, etc.) to qualify for positions that pay enough to sustain a household and offer some prospect, if not a guarantee, of further advancement.

Based on an extensive literature review, as well as interviews with community college leaders, business leaders, and thought leaders, this research identified three broad areas in which community colleges and employers need to partner in order to create a growing population of workforce-ready candidates. Those three foundational goals and nine strategies are:

Partner with each other to offer training and education that is aligned with industry needs

- Co-create and regularly update college curriculum around relevant technical and foundational skills based on industry needs
- Co-design programs that fit with students' lives and industry hiring cycles
- Incorporate classroom experiences that simulate real-world settings and scenarios

Establish relationships with each other that result in the recruitment and hiring of students and graduates

- Dedicate staff time toward managing employer-educator relationships
- Create processes for hiring community college students and graduates
- Develop commitments for hiring and recruitment

Make supply and demand decisions that are informed by the latest data and trends

- Collect and share data on the local supply for talent
- Collect and share data on the local demand for talent
- Build mechanisms to jointly monitor and improve the supply and demand for talent

The partnership imperative

America needs a new era of collaboration between those who teach and those who hire, on the basis of these nine strategies. Embracing this framework would require both community colleges and employers to accept several propositions:

- The current systems yield good employment outcomes for too few students;
- Educators, left to their own devices, lack the resources and perspective to fill the growing gap between the skills they provide and those that employers require;
- The lack of talent represents a material business risk for many companies and the economy more broadly;
- A failure to address the disparities in economic opportunity risks grave consequences for the social harmony and economic competitiveness of the United States.

Assessing the plausibility of such a change program requires understanding the current state of the relationship between community colleges and employers, for that provides us with an understanding of strengths that can be built on and the obstacles inhibiting progress. To gain insight into those questions, we surveyed both business leaders and community college leaders across the country. Our collaboration with the American Association of Community Colleges (AACC) proved critical to our completing this task. The AACC represents over 1,000 two-year associate's degree-granting institutions that currently serve more than 12 million students. Their assistance provided us with unprecedented access to the leadership cadre of a diverse range of U.S. community colleges—urban, suburban, and rural.[31]

Both surveys were conducted at the peak of COVID-19, launching in November 2020. The employer survey garnered responses from 800 business leaders with a roughly even split of senior executives, senior managers, and middle managers. It closed in December 2020.

Despite the extensive challenges faced by community colleges during this period, the AACC membership generously gave their time to fill out the survey, between November 2020 and April 2021.

In what we believe to be the first exercise of this magnitude, the survey garnered responses from 347 leaders, including presidents, chancellors, CEOs, provosts, deans, chairs, and vice presidents of workforce development. Representing the views of leaders from more than 25% of all community colleges in America, this census represents a unique data set. It sets a baseline on tracking employer-educator collaboration and provides opportunities for more research in building a stronger workforce-development ecosystem. (See Appendix I for details on the survey methodology and respondent profile. Both survey instruments and data on findings are freely available on Harvard Business School's Project on Managing the Future of Work website at https://www.hbs.edu/managing-the-future-of-work/Pages/default.aspx)

Altogether, the survey sought to answer the following six questions:

1. How synchronized are employers and community colleges in balancing the supply and demand for workforce-ready graduates?

2. How do employers and community colleges assess the state of their collaboration?

3. What actions are employers and community colleges taking today?

4. What obstacles do employers and community colleges perceive today?

5. How can effective employer-educator collaborations be designed, launched, and managed?

6. How has COVID-19 affected community colleges?

In the subsequent sections, we present our findings in detail. Each section ends with recommendations that community college leaders and business leaders should, in our opinion, consider in the service of fostering stronger and more effective partnerships.

A systemic lack of synchronization

At a very fundamental level, there is little consonance between America's community colleges and the employers they serve. The survey reinforced the extent to which businesses in the U.S. depend on the nation's community college system to provide manpower. A significant majority of employers surveyed, 84%, acknowledged their organization hired graduates of U.S. community colleges. (See Figure 8A.)

While employers rely on community colleges for talent, they have a surprisingly limited understanding of the relative capabilities of the education institutions. Business leaders provided remarkably uniform answers when asked to evaluate the performance of community colleges across eight different attributes. More tellingly, they often credited community colleges with significantly higher performance on dimensions like job guarantees and hiring targets. (See Figure 9 on page 20.)

Community colleges also betrayed gaps in their knowledge of both employers *and* their student bodies. For example, almost two-thirds of community college leaders indicated that they did not know what percentage of their students were working learners, a critical consideration in designing and delivering curriculum. (See Figure 8B.) Moreover, as subsequent data will demonstrate, educators often labored under significant misapprehensions as to employers' attitudes on issues ranging from the appropriateness of paying interns to their interest in sharing data on developments in the labor market. Perhaps most importantly, community colleges suffered from misimpressions as to their performance in the eyes of employers. For example, community college leaders rated the adequacy of their achievements in critical areas like teaching technical skills, developing training standards, and engaging employers to advise on content to be considerably higher compared to the assessment by business leaders.

Our previous research has defined that a location—a city, a region, or a nation—is competitive when businesses in that location are able to prosper and workers in that location are able to aspire to higher wages and better living standards.[32] If, across America, educators have a marginal understanding as to what happens to their students after they walked out of their institutions or the skills employers are actively seeking, it is unlikely our definition of competitiveness can be met. Students cannot know which jobs are in demand locally or how to prepare for them. Educators cannot design curricula that match what local employers need and prepare students for the jobs waiting for them locally. Business cannot plan to grow with confidence.

Figure 8: **Educators and employers demonstrate a mismatch in knowledge of student outcomes**

A. Does your company hire graduates of U.S. community colleges?

Employers

Yes	84%
No	16%

B. About what percent of your student body (both full-time and part-time) are incumbent workers?

Community colleges

0–20%	12%
21–40%	8%
41–60%	7%
61–80%	7%
81–100%	2%
I don't know	64%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

Local mismatches in the supply and demand for skills amplify into a vicious cycle nationwide. Businesses complain they cannot find the talent they need and turn to automation, outsourcing, offshoring, and contingent labor to access skills. Students lose faith in the promise of accessible post-secondary education, leading them to pursue jobs with limited career prospects. Educators sense the inadequacy of their curriculum and are discouraged when local employers show no desire to engage with them. Policymakers feel frustrated that "workforce development" efforts fail to bolster employment and attract investment. They resort to encouraging training programs around fads—biotech here, fintech, there—while often overlooking demand in local healthcare and financial services, light manufacturing and construction, and logistics.

The survey confirmed that both sides—educators and employers—recognize the current system suffers from multiple shortcomings. When asked to respond to the statement "my community college is producing the work-ready graduates that employers need," only 21% of community college leaders "strongly agreed." Another 59%, more cautiously "agreed." (See Figure 10.)

Employers corroborated that they too perceived that the supply of talent is not fully meeting the demand for talent. To the statement "community colleges are producing the work-ready employees that my company needs," only 26% "strongly agreed" while 36% "agreed." Nearly one in four employers sat on the fence, neither agreeing or disagreeing.

Figure 9: **Differing perceptions between employers and educators on actions for collaboration performed least adequately**

	Percentage of employers who believe their community college performs this action adequately	Percentage of educators who believe their community college performs this action adequately
Solicit employment opportunities on academic department-specific job boards	58%	32%
Deploy technology to facilitate contact between community colleges and employers	53%	30%
Encourage community college faculty to build relationships with recruiters and hiring managers	56%	30%
Enlist industry practitioners to train community college instructors	50%	30%
Survey community college graduates on their experience at their company (at least once per year)	54%	30%
Prioritize job placement rate over graduation rate as a community college outcome metric	51%	22%
Work with employers to establish policies, recruiting calendars, standard procedures, and/or hiring best practices	56%	21%
Co-design marketing campaigns with employers to attract students to community college programs	49%	18%
Commit to hiring targets for community college graduates	50%	14%
Commit to job guarantees for community college graduates	47%	13%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

Figure 10: **Employers are lukewarm compared to educators about the quality of talent produced by community colleges**

To what extent do you agree or disagree with the following statement: "Community colleges (my college) are (is) producing the work-ready employees that my company (employers) need(s)?

	Employers	Community colleges
Strongly agree	26%	21%
Agree	36%	59%
Neither agree nor disagree	24%	15%
Disagree	8%	5%
Strongly disagree	4%	0%
I don't know	2%	0%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

The partnership playbook

It is imperative to track the supply and demand for talent at the local level.

At least once a year, the community has to invest in understanding the pain points in the local economy—and who can do what to contribute to solving the problem. This effort can be led by city leaders, policymakers, the local business community, the community college leadership—any one or all together.

The fundamental questions to ask:

- Which middle-skills positions are critical for local businesses' prosperity, and which are hardest to fill in the community?

- Are the local community college or other skills providers generating the number of graduates needed, and are they employable?

- If not, what can local businesses do to help enhance the curriculum—whether it is for technical skills, foundational skills, or both?

- Are local employers reluctant to expand their operations due to concerns around the available of talent?

Poor grades for the state of collaboration

As the survey progressed, the findings identified the root cause of the malaise affecting the talent supply chain: insufficient employer engagement. Over the past few decades, as rapid technological change swept across middle-skills occupations, educators began to feel the pressures of changing demand. The challenge lay in understanding *how* the demand for middle-skills occupations was changing, as well as *how fast*. Across industries, the only entities possessing those insights were employers, for they were the ones who were investing in new technologies and, thus, they were positioned to best understand the implications for job design and skills requirements.

However, despite being required to adapt their business models in the face of competition from new entrants, employers have clung to their old models of sourcing talent instead of engaging with educators. For most companies the focus of attention has been on surviving the competitive forces at work *outside* the company. Far less time and thought has been expended on how all this technology is disrupting what's happening *inside* the company.

Perhaps the best example of this failure to revisit policies in the light of change are the tried-and-tested human resource practices for hiring—especially for middle-skills positions. As we identified in previous research, companies have consistently underesti-

mated the criticality of their middle-skills workforce and, consequently underinvested in both upskilling incumbent workers and developing talent-management pipelines to rejuvenate their workforces.[33] Rather, most employers continue to rely on the spot market for labor. Others succumb to degree inflation, slapping a four-year degree requirement on middle-skills job postings.[34] Few companies have revisited their existing models for attracting applicants, selecting candidates for final consideration, or composing and updating job descriptions.[35] Nor have employers revisited the skills providers they rely on for talent, invested more time and effort in building their relationship with community colleges, or shared data on their fast-evolving jobs requirements with their talent suppliers broadly.

Mismatch in understanding the need for partnership

The survey reveals that employers are yet to perceive the magnitude of the opportunity of partnering with community colleges. When asked the fundamental question on how important it was for employers and community colleges to partner to produce a work-ready workforce, the responses were starkly different. Nearly all the community college leaders saw collaboration as a pressing priority; far fewer employers reported the same sense of urgency. (See Figure 11.)

Figure 11: **Educators recognize the need for partnering to produce a work-ready workforce far more than employers**

Overall, how important do you believe it is for employers and community colleges to partner to produce a work-ready workforce?

	Employers	Community colleges
Very important	59%	98%
Somewhat important	30%	2%
Neither important nor important	8%	0%
Somewhat important	1%	0%
Very unimportant	1%	0%
I don't know	1%	0%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

Figure 12: **Educators are more enthusiastic than employers on the improvement in collaboration over time**

Overall, how has the state of collaboration between employers and community colleges trended over the last three years?

	Employers	Community colleges
A lot more collaborative	23%	21%
More collaborative	33%	51%
About as collaborative	32%	25%
Less collaborative	5%	1%
A lot less collaborative	1%	0%
I don't know	6%	1%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

Improving collaboration over time...

Community college leaders and business leaders both agreed that the state of collaboration had improved over the prior three years (both surveys entered the field in November 2020 and respondents were reminded to think about the three years prior to the advent of COVID-19). But once again, educators were more enthusiastic than employers. A sizable majority of community college leaders, 72%, reported that the state of collaboration was "a lot more collaborative" or "more collaborative" over the last three years (2017 to 2022, pre-COVID-19).[36] (See Figure 12.)

A majority of employers also agreed that the collaboration had improved and had a positive trajectory. Only 56% of employers reported that the trajectory of state of collaboration had improved "a lot more" or "more" over the last three years. Almost 40% of employers reported that their relationship with community colleges were unchanged or had worsened, despite the growing skills shortage that preceded the onset of COVID-19.

...but scoring "Bs" and "Cs" on collaboration

Educators and employers recognized that there is much room for improvement on both sides. Rather than blame each other, both sides recognized that they, themselves, have to do more. Community colleges tended to be more satisfied with their efforts in the partnership than employers. A large number of community colleges, 48%, gave themselves a "B" in terms of being "satisfied" with their efforts. (See top of Figure 13 on page 24.) While grading employers, educators signaled their disappointment: 93% of surveyed community college leaders gave employers a "B" or lower. Only 7% of community colleges gave employers an "A" grade, a rating of "very satisfied." (See bottom of Figure 13 on page 24.)

Turning a cultural meme on its head, employers' self-assessment reflected significant grade inflation. Two-thirds awarded themselves "A" or "B" grades, with fewer than 10% giving themselves less than a passing grade. Employers believed they were doing enough to secure the benefits available to them through working with community colleges, despite their ambivalence about the quality of community college graduates' skills (see Figure 10 on page 21) and near-perpetual concern over the availability of talent.

Exposing areas of weakness

The symptom of low engagement by employers is not just a sentiment; it colors the way employers act. As we strove to understand why the engagement between community colleges and employers remains underdeveloped, we found employers systematically placed less emphasis on each of the three foundational goals on which collaboration rests: partnering with each other to offer training and education that is aligned

with industry needs; establishing relationships with each other that result in the recruitment and hiring of students and graduates; and making supply and demand decisions that are informed by the latest data and trends. (See Figure 14.)

In all three areas, the percentage of community college leaders who believed collaboration was extremely important was significantly higher than that of employers. Notably, all three areas were viewed as important by community college leaders. (See Figure 14.) Employers attached far less significance to all three, with almost

a quarter of surveyed employers deeming the goals as moderately important at best.

Moreover, both community college and business leaders placed the least importance on decision making based on current market data and forecasts. This is worth underscoring: Developing a shared understanding of emerging skills requirements based on mutually accessible data will be essential in the future, given the rate of technological change.

Figure 13: **Higher grades on self-assessment, lower grades on collaboration**

Overall, as you think about your community college's (company's) partnership with employers (community colleges) to produce a work-ready workforce, what grade would you give <u>community colleges</u>?
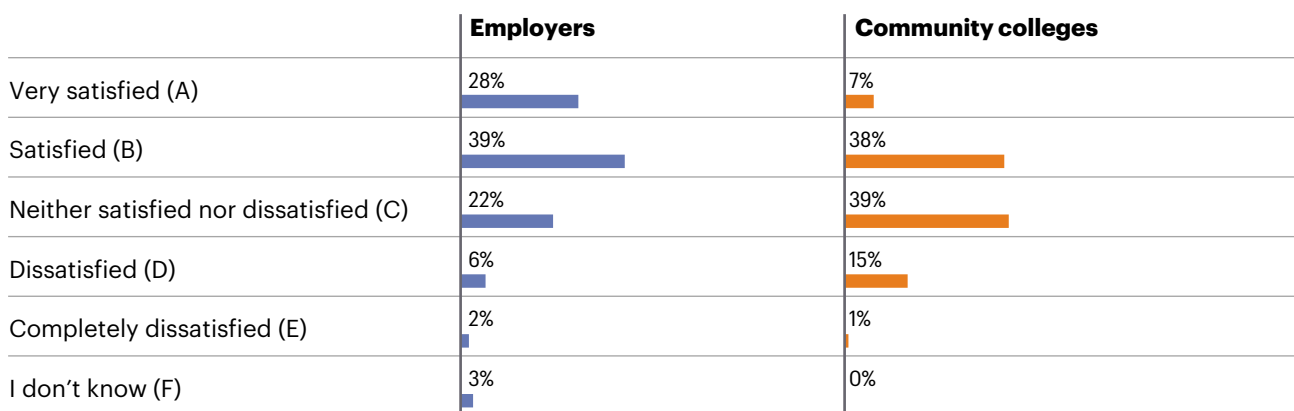
	Employers	Community colleges
Very satisfied (A)	28%	7%
Satisfied (B)	39%	38%
Neither satisfied nor dissatisfied (C)	22%	39%
Dissatisfied (D)	6%	15%
Completely dissatisfied (E)	2%	1%
I don't know (F)	3%	0%

Overall, as you think about your community college's (company's) partnership with employers (community colleges) to produce a work-ready workforce, what grade would you give <u>employers (your company)</u>?
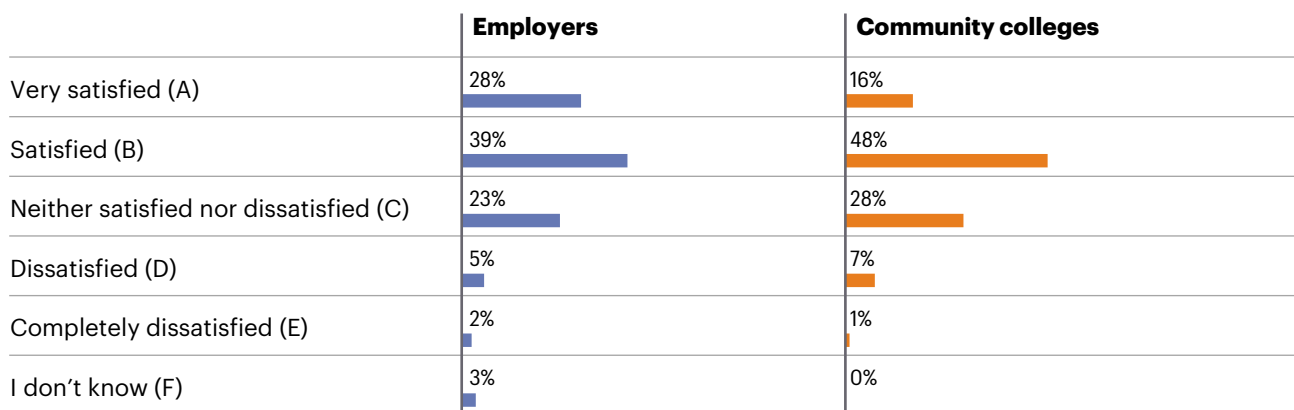
	Employers	Community colleges
Very satisfied (A)	28%	16%
Satisfied (B)	39%	48%
Neither satisfied nor dissatisfied (C)	23%	28%
Dissatisfied (D)	5%	7%
Completely dissatisfied (E)	2%	1%
I don't know (F)	3%	0%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

Figure 14: **Community colleges perceive the significance of collaboration across three goals, more than employers**

How important do you believe it is for employers and community colleges to partner <u>to offer training and education that is aligned with industry needs</u>?

	Employers	Community colleges
Extremely important (A)	44%	83%
Very important (B)	32%	16%
Moderately important (C)	15%	0%
Slightly important (D)	6%	0%
Not at all important (E)	2%	0%
I don't know (F)	1%	0%

How important do you believe it is for employers and community colleges to collaborate <u>to establish relation-ships that result in the recruitment and hiring of students and graduates</u>?

	Employers	Community colleges
Extremely important (A)	39%	78%
Very important (B)	34%	21%
Moderately important (C)	18%	2%
Slightly important (D)	6%	0%
Not at all important (E)	2%	0%
I don't know (F)	2%	0%

How important do you believe it is for employers and community colleges <u>to make decisions that are informed by the latest data and trends</u>?

	Employers	Community colleges
Extremely important (A)	38%	64%
Very important (B)	40%	33%
Moderately important (C)	15%	3%
Slightly important (D)	5%	0%
Not at all important (E)	1%	0%
I don't know (F)	2%	0%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

The partnership playbook

No amount of effort by community colleges can compensate for the lack of engagement by employers.

Employers, in their own self-interest, cannot afford to ignore investing in their talent pipeline.

Just as employers form partnerships with education institutions and suppliers—such as coding bootcamps for high-demand, high-skill occupations—they should form partnerships with community colleges for high-demand, middle-skills occupations.

To create a work-ready pipeline of middle-skills workers, educators and employers have to work together in all three areas:

- **Partner to offer training and education that is aligned with industry needs**
  - *Co-create and regularly update curriculum around relevant technical and foundational skills based on industry needs;*
  - *Co-design programs that fit with students' lives and industry hiring cycles;*
  - *Incorporate classroom experiences that simulate real-world settings and scenarios;*
  - *Launch work-based learning programs that allow employers to train potential workers in their specific procedures and contribute to their learning. Such programs allow both the employer and the aspiring worker to follow their interests in a full-time position, reducing instances of expensive mismatches.*

- **Establish relationships with each other that result in the recruitment and hiring of students and graduates**
  - *Dedicate staff time toward managing employer-educator relationships;*
  - *Create processes for hiring community college students and graduates;*
  - *Develop commitments for hiring and recruitment;*
  - *Provide advisers and faculty members with practical knowledge and other materials and access to technologies otherwise unavailable to the community college.*

- **Make supply and demand decisions that are informed by the latest data and trends**
  - *Collect and share data on the local supply for talent;*
  - *Collect and share data on the local demand for talent;*
  - *Build mechanisms to jointly monitor and improve the supply and demand for talent.*

All three areas require substantial attention. Shirking on any of them risks undermining progress made on other fronts.

Actions to bridge the employer-educator gap

In principle, employers and educators have always acknowledged the need for and benefits from closer collaboration. There are myriad examples. In the 1990s, Monroe Community College in Rochester, N.Y., underwent a strategic reorganization to shift from the precision optical components manufacturing that flourished before the fortunes of local employers Kodak, Xerox, and Bausch & Lomb began to decline.[37] The community college focused on programs that allowed professionals with management, finance, and technical backgrounds who worked in those companies and their suppliers to move into fields that met the emerging needs of the local economy and that were in demand through gig platforms. By 2000, Walla Walla Community College in Washington State had partnered with the emergent local wine industry to launch courses in enology and viticulture.[38] Chattanooga State Community College in Tennessee runs a training center known as Volkswagen Academy to support the automaker's extensive local operations. Since 2011, it has also trained technicians for the local chemicals cluster led by Wacker Polysilicon North America.[39] In 2014, Central Piedmont Community College in Charlotte, N.C., came into the national spotlight when it partnered with Siemens to launch new courses in advanced manufacturing and mechatronics.[40] Since 2016, La Guardia Community College in New York City has worked closely with large local healthcare employers like Memorial Sloan Kettering Cancer Center, Mount Sinai, and Elmhurst Hospital to train students for medical billing positions on a tuition-free basis.[41]

Yet such success stories remain the exception.

In practice, there are no standards for what a good partnership between a community college and local employers looks like. In the wake of the Great Recession, federal efforts sought to spark "new vocationalism" and foster closer community college-industry partnerships (CCIPs). But most employers and community colleges across the country have little understanding of the best practices that underlie those success stories.[42]

This research effort sought to fill that void. Based on a mixed-methods approach, an attempt was made to translate the three-part employer-educator goals and strategies framework into specific *actions* that each could take to build a middle-skills talent pipeline in their community. To validate the proposed actions, the list was reviewed, vetted, and refined based on feedback from both community college leaders and business leaders.

The resulting final list consists of 44 actions that both educators and employers need to work on together. In addition, we offer seven actions that community colleges can take unilaterally to make the collaboration more effective for both sides. Together, these 51 actions provide a framework for creating the workforce of the future. (See Figure 15 on pages 28 and 29.)

We will be the first to acknowledge that this survey is far from perfect in some regards—but it represents a start. It attempts to provide a list of actions that are essential to some community colleges and the regions they serve and potentially relevant to many others. Community colleges differ along multiple dimensions. They are located in areas with different population densities and demographics. They are more or less proximate to other post-secondary institutions. They serve unique combinations of industries and companies. Similarly, employers represent different industries and serve diverse needs. Nonetheless, both community college leaders as well as business leaders can improve their performance in getting more aspiring workers on pathways to good jobs and easing the skills shortage by taking at least some, if not most, of the actions recommended in this framework.

In selecting the actions, a deliberate choice was made—one that was endorsed by community college reviewers and business leaders—to *exclude* all elements of financial partnership. The goal of this research was not to focus on fund-raising, donations, and in-kind support. Such efforts are critical and, in many instances, integral to the relationships between community colleges and local employers. However, this research effort focuses on the management actions and recurring processes that educators and employers must implement to foster more effective, enduring collaborations.

Figure 15: **Areas of collaboration and actions framework**

GOAL 1 | **Partner to offer training and education that is aligned with industry needs**

STRATEGY

Co-create and regularly update college curriculum around relevant technical and foundational skills based on industry needs

TACTICS
- Engage employers on industry advisory boards
- Engage employers in curriculum design
- Offer and support industry-recognized certifications
- Offer and support micro-credentials
- Help students obtain professional licenses
- Teach foundational skills in the curriculum
- Teach technical skills in the curriculum
- Offer workplace writing courses
- Offer workplace applied math courses
- Offer workplace verbal communication courses
- Co-develop standards for skills and knowledge
- Offer English for Speakers of Other Languages (ESOL courses)
- Offer ESOL courses aligned with specific professions or industries

STRATEGY

Co-design programs that fit with students' lives and industry hiring cycles

TACTICS
- Help workers currently in the workforce upgrade their skills
- Offer customized programs for companies' employees
- Develop convenient program calendars
- Offer credit for students' prior knowledge
- Offer credit for students' prior work experience

STRATEGY

Incorporate classroom experiences that simulate real-world settings and scenarios

TACTICS
- Source industry practitioners to teach community college courses
- Offer job-site visits for community college students
- Offer class projects that mimic real-world work for community college courses
- Offer non-credit-bearing experiential learning opportunities
- Offer credit-bearing experiential learning opportunities
- Enlist industry practitioners to train community college instructors
- Donate or lease equipment or license software to community colleges
- Create work-based or learn-and-earn opportunities

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

GOAL 2 — Establish relationships that result in the recruitment and hiring of students and graduates

STRATEGY — Dedicate staff time toward managing employer-college relationships

TACTICS

- Assign a team or individual to manage community college-employer partnerships
- Establish partnerships for employers to recruit and hire from community colleges
- Partner with employers of graduates and their alma maters
- Build relationships between faculty and recruiters

STRATEGY — Create processes for hiring community college students and graduates

TACTICS

- Deploy technology to facilitate contact between community colleges and employers (e.g., Handshake, Salesforce, etc.)
- Offer in-person or virtual sessions for community college students to meet with recruiters and hiring managers
- Work together to establish policies, recruiting calendars, standard procedures, and/or hiring best practices
- Offer career services (resume/cover letter writing, job-search fundamentals)

STRATEGY — Develop commitments for hiring and recruitment

TACTICS

- Commit to job guarantees for community college graduates (employer commitments to hire a fixed number of students per cycle)
- Commit to hiring targets for community college graduates (employer commitments to hire an approximate number of students per cycle)
- Establish employer-funded scholarship programs for community college students
- Post employment opportunities on community college-wide job boards
- Post employment opportunities on academic department-specific job boards
- Co-design marketing campaigns with employers to attract students to community college programs

GOAL 3 — Make decisions that are informed by the latest data and trends

STRATEGY — Collect and share data on the local supply for talent

TACTICS

- Collect and monitor data on local demographic trends
- Seek feedback from colleges/employers as a partner (at least once a year)
- Survey employees who attended community college on their experience at their company (at least once per year)

STRATEGY — Collect and share data on the local demand for talent

TACTICS

- Survey employers on their workforce needs (at least once per year)
- Track the local community on its workforce needs (at least once per year)
- Track data on job/industry trends (e.g., job/earnings growth, changing nature of jobs in an industry)
- Track the retention rates of employees who attended community college

STRATEGY — Build mechanisms to jointly monitor and improve the supply and demand for talent

TACTICS

- Use job placement rate as part of your community college's outcome metrics
- Use graduate wages as part of your community college's outcome metrics
- Prioritize job placement rate over graduation rate as a community college outcome metric
- Embed workforce development objectives into your community college's strategic plan
- Counsel students to enroll in programs with the highest labor market demand

Figure 16: **Employers take fewer actions than educators and believe their efforts are more adequate**
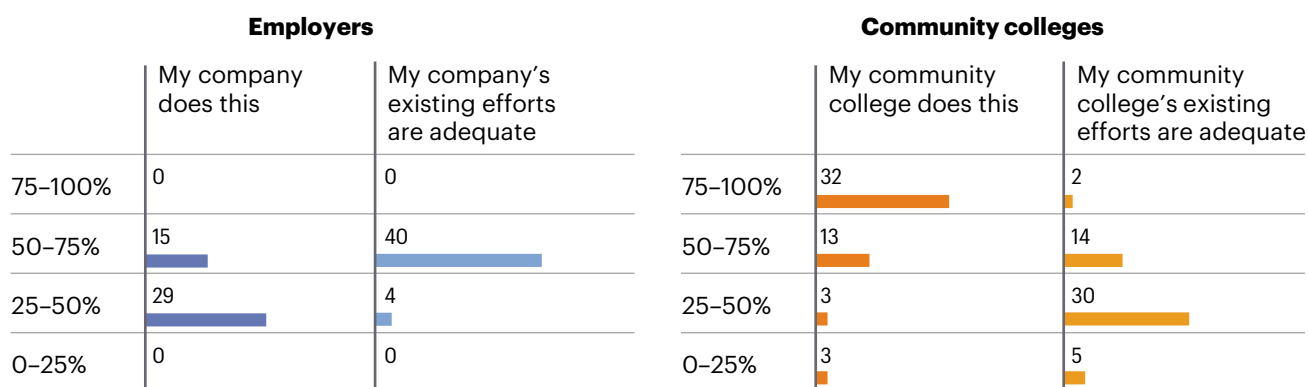
Employers

	My company does this	My company's existing efforts are adequate
75–100%	0	0
50–75%	15	40
25–50%	29	4
0–25%	0	0

Community colleges

	My community college does this	My community college's existing efforts are adequate
75–100%	32	2
50–75%	13	14
25–50%	3	30
0–25%	3	5

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

Figure 16 summarizes the current state of affairs:

- Community colleges are taking actions, and they are concerned that they need to do more in order to help create a workforce-ready cadre from their graduates.

- Employers are not taking nearly as many actions to partner with community colleges. And they are complacent about the adequacy of their efforts.

Community colleges: Taking initiative, but not adequately

Community college leaders were quick to check off boxes indicating they were taking specific actions, but they were far less confident that those actions were adequate for creating work-ready graduates. In the case of 32 actions, a majority of community colleges reported that they were implementing them. (See Figure 17 on pages 31 and 32.) Most of those pertained to the core mission of community colleges—teaching students. (See Appendix III for full list of actions undertaken.) For example, 99% of community college leaders indicated that they teach technical skills, 94% teach foundational skills, and 98% offer industry-recognized certifications. Additionally, college leaders largely indicate that they engage employers in both industry advisory board settings (99%) and curriculum design (93%).

However, they were much less likely to take action pertaining to student job placement. The three areas in which community colleges were least likely to act included: prioritizing job placement rate over graduation rate as an outcome metric (18%); committing to hiring targets for graduates (21%); and committing to

job guarantees for graduates (22%). They were also the three actions community college acknowledged they perform least adequately.

In addition to asking which action they took, educators and employers were asked to comment on the adequacy of existing efforts. Predictably, community college leaders seldom selected "I don't know" as an option as they reported out on their community college's experience. Community college leaders selected the option for only 4% of actions. (See Figure 17 on pages 31 and 32.)

The three actions that community colleges were most likely to say that they do adequately were teaching technical skills (85%); developing standards for what skills and knowledge students can expect to acquire in their classes (75%); and engaging employers on industry advisory boards (71%).

Employers: Lagging in action and adequacy

Across the board, employers reacted more tepidly to taking actions for building a work-ready workforce—unlike educators, who focused on a relatively uniform and broad set of 32 actions, where 75% to 100% of all educators indicated their institutions were active. By contrast, there was not a single action that a majority of—let alone all—employers undertook. (See Appendix III for full list of actions undertaken.) There was no action that more than 60% of employers implemented. Employers ranged from 39%–56% in adopting the practices for fostering partnerships, a much narrower spread than that exhibited by educators.

Figure 17: **Educators' self-assessment on taking actions for collaboration**

The top 10 most commonly taken actions

Ranking	Action	Percentage responding "My community college does this"
1	Engage employers on industry advisory boards	99%
2	Teach technical skills	99%
3	Offer industry-recognized certifications	98%
4	Offer programs to help workers currently in the workforce upgrade their skills	97%
5	Develop standards for what skills and knowledge students can expect to acquire in their classes	97%
6	Help students obtain professional licenses	95%
7	Offer customized programs for companies' employees	95%
8	Teach foundational skills	94%
9	Collect and monitor data on local demographic trends	94%
10	Offer career services	94%

The top 10 least commonly taken actions

Ranking	Action	Percentage responding "My community college does not do this"
1	Prioritize job placement rate over graduation rate as a community college outcome metric	74%
2	Commit to job guarantees for community college graduates	73%
3	Commit to hiring targets for community college graduates	71%
4	Co-design marketing campaigns with employers to attract students to community college programs	58%
5	Use graduate wages as part of your community college's outcome metrics	43%
6	Work with employers to establish policies, recruiting calendars, standard procedures, and/or hiring best practices	41%
7	Offer English for Speakers of Other Languages (ESOL courses) aligned with specific professions or industries	41%
8	Enlist industry practitioners to train community college instructors	40%
9	Survey community college graduates on their experience at their company (at least once per year)	39%
10	Deploy technology to facilitate contact between community colleges and employers	37%

Figure 17: **Educators' actions** (continued)

The top 10 "I don't knows"

Ranking	Action	Percentage responding "I don't know"
1	Solicit employment opportunities on academic department-specific job boards	11%
2	Counsel students to enroll in programs with the highest labor market demand	11%
3	Survey community college graduates on their experience at their company (at least once per year)	10%
4	Use graduate wages as part of your community college's outcome metrics	10%
5	Work with employers to establish policies, recruiting calendars, standard procedures, and/or hiring best practices	9%
6	Prioritize job placement rate over graduation rate as a community college outcome metric	8%
7	Commit to hiring targets for community college graduates	8%
8	Deploy technology to facilitate contact between community colleges and employers	8%
9	Solicit employment opportunities for community college-wide job boards	8%
10	Offer workplace writing courses	7%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

Employers were most likely to report taking the following actions: establishing partnerships to recruit and hire from community colleges (56%); encouraging recruiters and hiring managers to build relationships with faculty (56%); and supporting college efforts to teach technical skills (55%). (See Figure 18 on pages 33 and 34.)

Employers were least likely to support efforts to offer ESOL (English to Speakers of Other Languages) courses (39%); donate/lease equipment or license software to colleges (41%); and co-design marketing campaigns to attract students to their programs (42%). Significantly, these least-taken actions could have a powerful impact on the ability to create more and better-trained workers. For example, previous research has shown that by ignoring the small matter of language-training, employers unknowingly deprive themselves of highly motivated workers.[43] In communities with a higher number of non-English-speaking residents, employers can easily tap into the hidden talent pool.[44]

Ironically, despite being guarded in their evaluation of community colleges' ability to provide workers with requisite skills (see Figure 10 on page 21) and complaining of skills shortages, employers perceived that the actions they took to support partnerships were adequate. The range of responses when employers were asked whether their existing efforts were adequate ranged from 47%–60%. Thus, employers are taking fewer steps to work with community colleges while simultaneously being disaffected by community colleges' outcomes and satisfied with their own level of commitment.

Whereas community colleges selected "I don't know" to a mere 4% of actions, employers selected "I don't know" to 17% of actions. Such a relatively high percentage of "I don't know" responses suggests that employers' low standards and lack of engagement is also fueling an awareness gap. Not only are many employers not engaged, a material percentage appear to have no real interest in supporting deeper collaboration with educators. (See Figure 18 on pages 33 and 34.)

When it came to commenting on the adequacy of the actions they take, employers were most likely to

Figure 18: **Employers' self-assessment on taking actions for collaboration**

The top 10 most commonly taken actions

Ranking	Action	Percentage responding "My company does this"
1	Establish partnerships to recruit and hire from community colleges	56%
2	Encourage recruiters and hiring managers to build relationships with community college faculty	56%
3	Support community college efforts to teach technical skills	55%
4	Offer job-site visits for community college students	55%
5	Partner with community colleges that their employees come from	54%
6	Support community college efforts to offer career-building support services	54%
7	Post employment opportunities on community college-wide job boards	53%
8	Send current workers to upgrade their skills at community colleges	52%
9	Create work-based or learn-and-earn opportunities for community college students	52%
10	Offer in-person or virtual sessions for community college students to meet with recruiters and hiring managers	52%

The top 10 least commonly taken actions

Ranking	Action	Percentage responding "My company does not do this"
1	Commit to job guarantees for community college graduates	52%
2	Co-design marketing campaigns with community college to attract students to programs	48%
3	Donate or lease equipment or license software to community colleges	47%
4	Support community college efforts to offer English for Speakers of Other Languages (ESOL courses)	47%
5	Commit to hiring targets for community college graduates	46%
6	Establish employer-funded scholarship programs for community college students	46%
7	Enlist industry practitioners to train community college instructors	46%
8	Support community college efforts to offer workplace writing courses	46%
9	Survey employees who attended CC on their experience at their company (at least once per year)	45%
10	Assign a team or individual to manage community college-employer partnerships	45%

Figure 18: **Employers' actions** (continued)

The top 10 "I don't knows"

Ranking	Action	Percentage responding "I don't know"
1	Support community college efforts to offer English for Speakers of Other Languages (ESOL courses)	14%
2	Donate or lease equipment or license software to community colleges	12%
3	Support community college efforts to offer micro-credentials (e.g., sales, IT support, service excellence)	12%
4	Co-develop standards for what skills and knowledge students can expect to acquire in classes	12%
5	Deploy technology to facilitate contact between community colleges and employers	12%
6	Track the retention rates of employees who attended community college	12%
7	Support community college efforts to offer workplace applied math courses	11%
8	Support community college efforts to offer credit-bearing experiential learning opportunities	11%
9	Offer class projects that mimic real-world work for community college courses	11%
10	Support community college efforts to counsel students to enroll in programs with the highest labor market demand	11%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

report adequacy in actions, such as offering job-site visits (60%) and supporting college efforts to offer career-building support services (60%). They were least likely to report adequacy in supporting college efforts to offer ESOL courses (47%), provide input to colleges on curriculum design (49%), and enlisting industry practitioners to train college instructors (49%).

Patterns from the partnership

A closer look at the actions taken and their adequacy revealed the shaky underpinnings of the current level of collaboration. To glean a granular understanding of the state of collaboration, we asked both sides to evaluate the other on each of the nine categories of action in the goals and strategies framework. It soon became clear that employers and community colleges were not aligned on the importance of various actions, implying there is much room for improvement. Here, we consider each in detail.

I. Co-create and regularly update college curriculum around relevant technical and foundational skills based on industry needs

In order to meet the demands of the 21st-century middle-skills occupations, there is an urgent need for educators and employers to monitor the relevance of current curricula. Given the rapid changes in the nature of work, it is imprudent to assume faculty or advisory committee members can ensure that their syllabi reflect state-of-the-art content without receiving regular assistance. Only employers can define the relevance of emerging technical and foundational skills to employability and predict the implications for future requirements. Employers and community colleges have to work in tandem to ensure that the desired end-product—qualified, work-ready graduates—meet marketplace standards. However, that is far from the current reality.

As the right column of Figure 19 shows, a large percentage of community colleges are committed to co-creating and updating materials. That is hardly a surprise; curriculum development is central to the work of any educator. However, the efforts of community colleges in that regard are lacking, specifically regarding technical skills. More tellingly, community colleges express uncertainty about the efficacy of their actions.

Figure 19: **Inadequate upgrading of curriculum based on industry needs**

Alignment on updating curriculum based on industry needs: Co-create and regularly update college curriculum around relevant technical and foundational skills based on industry needs

	Employers		Educators	
	Existing efforts by employers are adequate	My company's existing efforts are adequate	Existing efforts by community colleges are adequate	My community college's existing efforts are adequate
Teach technical skills	74%	54%	63%	85%
Develop standards for what skills and knowledge students can expect to aquire in their classes	51%	51%	61%	75%
Engage employers on industry advisory boards	66%	50%	47%	71%
Help students obtain professional licenses	56%	53%	57%	69%
Teach foundational skills	61%	54%	62%	68%
Offer English for Speakers of Other Languages (ESOL courses)	31%	47%	57%	61%
Offer industry-recognized certifications	62%	54%	59%	60%
Engage employers in curriculum design	70%	49%	49%	58%
Offer workplace applied math courses	37%	50%	57%	49%
Offer workplace writing courses	31%	51%	53%	48%
Offer workplace verbal communication courses	38%	52%	57%	48%
Offer micro-credentials (e.g., sales, IT support, service excellence)	38%	51%	56%	35%
Offer English for Speakers of Other Languages (ESOL courses) aligned with specific professions or industries			53%	35%

Roughly 50% judge their efforts adequate across a broad array of steps related to ensuring the relevance of their curriculum. Employers' responses mirror those provided by the community colleges. In a pattern that suffuses the survey results, employers evaluate their performance as considerably better than that of community colleges across the board.

II. Co-design programs that fit with students' lives and industry hiring cycles

For this ecosystem to be in equilibrium, it is critical that each side understands the constraints of the other. In interviews, community college leaders often voiced concern that employers had little sympathy with or understanding of their students' needs. A majority of students are working-learners, holding down a full- or part-time job while pursuing their course of study. However, few programs offer credit for past or current work experience, attenuating students' time to degree completion. Educators expressed frustration over the inability to credit such experience; fewer than 40% rank their ability to do so as adequate. They also judge their capacity to schedule courses to accommodate the needs of both learners and employers as lacking.

A strategic solution to closing the gap between the supply and demand for talent is to provide workers who are currently in the workforce more avenues to upgrade their skills such that they can aspire to higher wages and better jobs. In this crucial matter, 61% of community colleges believed they were doing an adequate job, and 64% of employers agreed. The reality is that there is still much more room for improvement—with employers taking the lead in specifying which skills are in demand. While 58% of employers believed they were doing an adequate job in providing such opportunities, only 46% of community college leaders agreed. Instead, a majority of community college leaders believed that employers could do more to provide relevant training opportunities to workers who are already employed. (See Figure 20.)

Figure 20: **Inadequate efforts to co-design programs**

Alignment on updating curriculum based on industry needs: Co-design programs that fit with students' lives and industry hiring cycles

Employers	Existing efforts by employers are adequate	My company's existing efforts are adequate
Offer programs to help workers currently in the workforce upgrade their skills	46%	58%
Offer customized programs for companies' employees	59%	57%
Develop program calendars that are convenient for employers and learners	33%	56%

Community colleges	Existing efforts by community colleges are adequate	My community college's existing efforts are adequate
Offer programs to help workers currently in the workforce upgrade their skills	64%	61%
Offer customized programs for companies' employees	52%	62%
Develop program calendars that are convenient for employers and learners	64%	37%
Offer credit for students' prior knowledge	53%	36%
Offer credit for students' prior work experience	53%	33%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

III. Incorporate classroom experiences that simulate real-world settings and scenarios

Students enrolled in America's community colleges are just not getting access to the real-world experiences that they need in order to be workforce ready. The survey brought out this insight clearly. As the right column of Figure 21 shows, across all eight actions, community college leaders express concern over the adequacy of actions to provide students real-world experience. Only

Figure 21: **Inadequate efforts to provide students with real-world experience**

Alignment on updating curriculum based on industry needs: Incorporate classroom experiences that simulate real-world settings and scenarios

Employers	Existing efforts by employers are adequate	My company's existing efforts are adequate
Source industry practitioners to teach community college courses	40%	51%
Offer job-site visits for community college students	63%	60%
Source projects that reflect real-world work from employers for community college class curriculum	36%	52%
Offer non-credit-bearing experiential learning opportunities	47%	53%
Offer credit-bearing experiential learning opportunities	45%	53%
Enlist industry practitioners to train community college instructors	30%	49%
Solicit donated or leased equipment or software licenses from employers	47%	50%
Create work-based or learn-and-earn opportunities	37%	55%

Community colleges	Existing efforts by community colleges are adequate	My community college's existing efforts are adequate
Source industry practitioners to teach community college courses	54%	58%
Offer job-site visits for community college students	59%	43%
Source projects that reflect real-world work from employers for community college class curriculum	55%	36%
Offer non-credit-bearing experiential learning opportunities	54%	41%
Offer credit-bearing experiential learning opportunities	55%	46%
Enlist industry practitioners to train community college instructors	50%	30%
Solicit donated or leased equipment or software licenses from employers	49%	47%
Create work-based or learn-and-earn opportunities	58%	35%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

in the matter of sourcing industry practitioners were more than half of community college leaders willing to say that their efforts were enough. A minority of community college leaders deemed their efforts related to the other seven actions sufficient. While community colleges had the self-awareness that the current curriculum was failing to provide real-world experience, business leaders were more generous in their estimation. Across all but one action, more than 50% of employers believed community colleges were doing enough to incorporate experiential learning into their curricula.

Just as community colleges deem their own efforts lacking to ensure the realism of their instruction, they adjudge employers' efforts as also deficient. Employers, repeating a consistent pattern in the survey results, assessed their performance to be significantly better than their community college counterparts. Only on the issue of arranging job-site visits—an activity that requires only modest investment and imparts little of enduring value—did a majority of both respondents deem employers' efforts as adequate.

Lackluster performance along dimensions of work-based learning also emerged as an area of acute concern. Providing aspiring workers with direct exposure to the nature of a job is critical. That is the only way to reduce instances of mismatches in which a learner prepares for a career that they ultimately conclude is not worthy to pursue. Substantive work-based learning promises to improve the early productivity of new hires, through their exposure to the practical, day-to-day application of skills taught in the classroom, lab, or shop. Such programs are also important signs of

commitment by employers. Almost no employer will go to the trouble or expense of sponsoring work-based learning unless they are genuinely invested in the proposition that they will hire workers from the program.

IV. Dedicate staff time toward managing employer-college relationships

Although both employers and community colleges believe effective partnering to be essential for workforce development (see Figures 11 through 15), most acknowledge that they are not dedicating enough staff time to support that ambition. While roughly half of both sets of respondents believe that adequate attention is being paid to sustaining such partnerships, it is telling that community colleges assess employers as failing to dedicate specific personnel to building relationships. Only 29% of educators deemed employers as making adequate investments in staff; only 39% believed that companies were cultivating relationships with their faculty. (See Figure 22.) Business leaders were once again far more sanguine about the sufficiency of their investments.

The lack of investment of time and, hence, implied commitment is indicative of a broader disconnect between employers' stated intentions and tangible actions. While most employers embrace the proposition that working closely with community colleges is important for their competitive prospects, many are passive when it comes to taking concrete actions, such as setting up work-based learning programs (see Figure 21 on page 37) and dedicating staff to such tasks as supporting teaching staff.

Figure 22: **Inadequate efforts by employers to dedicate staff time to partnership**

Establish relationships that result in the recruitment and hiring of students: Dedicate staff time toward managing employer-college relationships

Employers	Existing efforts by employers are adequate	My company's existing efforts are adequate
Assign a team or individual to manage community college-employer partnerships	29%	52%
Establish partnerships for employers to recruit and hire from your community college	49%	58%
Partner with employers where your graduates work	52%	57%
Encourage community college faculty to build relationships with recruiters and hiring managers	39%	57%

Community colleges	Existing efforts by community colleges are adequate	My community college's existing efforts are adequate
Assign a team or individual to manage community college-employer partnerships	53%	48%
Establish partnerships for employers to recruit and hire from your community college	60%	46%
Partner with employers where your graduates work	58%	47%
Encourage community college faculty to build relationships with recruiters and hiring managers	56%	30%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

V. Create processes for hiring community college students and graduates

The more specific the actions became, the more they revealed the hollowness of the current state of collaboration between educators and employers. The survey highlighted that the processes required to establish a smooth flow of talent from community colleges to local employers were either weak or simply did not exist.

In the fundamental matter of establishing policies for hiring, aligning calendars for hiring, instituting standard procedures, or seeking best practices, the results were particularly stark. Only 21% of educators believed they were doing enough, and only 26% believed employers had invested in implementing best practices in the critical, albeit prosaic processes captured in Figure 23.

Employers had a completely different appreciation of the situation. In the estimation of a significant majority,

these fundamental processes work just fine. Fifty-six percent of employers reported that their community college's actions were adequate, and 56% reported that their actions represented best practices. A similar gap in perception existed relative to the deployment of technology to enhance coordination of the relationships.

Once again, survey results showed that employers can only blame themselves if they are struggling to fill middle-skills positions. If employers choose to stay distant and not invest time and effort to set up a hiring pipeline with their local community college, they are inflicting wounds on their own business operations. Talent that is in their backyard—community college students who are eager and willing to join work, train, and contribute productively—can lie hiding in plain sight if employer hiring practices are too weak to direct them toward open positions.

Figure 23: **Inadequate efforts to invest in processes that foster hiring from community colleges**

Establish relationships that result in the recruitment and hiring of students: Create processes for hiring community college students and graduates

Employers	Existing efforts by employers are adequate	My company's existing efforts are adequate
Offer in-person or virtual sessions for community college students to meet with recruiters and hiring managers	49%	56%
Deploy technology to facilitate contact between community colleges and employers	25%	50%
Work with employers to establish policies, recruiting calendars, standard procedures, and/or hiring best practices	26%	56%

Community colleges	Existing efforts by community colleges are adequate	My community college's existing efforts are adequate
Offer in-person or virtual sessions for community college students to meet with recruiters and hiring managers	59%	46%
Deploy technology to facilitate contact between community colleges and employers	53%	30%
Work with employers to establish policies, recruiting calendars, standard procedures, and/or hiring best practices	56%	21%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

VI. Develop commitments for hiring and recruitment

Fewer than one in five community college leaders believed either side's actions were adequate in creating a steady, meaningful pipeline of talent from their student body to local employers. In a vast majority of community colleges across the country, there are no efforts for educators and employers to market the open middle-skills positions locally and attract students into the pool. The extent of the disconnect over the depth of commitment is apparent in the issue of job guarantees. Community college leaders expressed nearly universal dissatisfaction with employers on that issue. Fewer than 15% believed employers' willingness to set hiring targets or to offer job guarantees to students who complete a program is sufficient. Employers, on the other hand, reckoned their reluctance to undertake such obligations to be entirely reasonable. (See Figure 24.)

Figure 24: **Lack of commitment for hiring from community colleges**

Establish relationships that result in the recruitment and hiring of students: Develop commitments for hiring and recruitment

Employers	Existing efforts by employers are adequate	My company's existing efforts are adequate
Solicit employment opportunities for community college-wide job boards	49%	57%
Establish employer-funded scholarship programs for community college students	37%	53%
Solicit employment opportunities on academic department-specific job boards	35%	57%
Co-design marketing campaigns with employers to attract students to community college programs	16%	51%
Commit to hiring targets for community college graduates	11%	53%
Commit to job guarantees for community college graduates	10%	52%

Community colleges	Existing efforts by community colleges are adequate	My community college's existing efforts are adequate
Solicit employment opportunities for community college-wide job boards	58%	44%
Establish employer-funded scholarship programs for community college students	51%	36%
Solicit employment opportunities on academic department-specific job boards	58%	32%
Co-design marketing campaigns with employers to attract students to community college programs	49%	18%
Commit to hiring targets for community college graduates	50%	14%
Commit to job guarantees for community college graduates	47%	13%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

VII. Collect and share data on the local supply for talent

As highlighted earlier, educators and employers have a long way to go in terms of building a partnership based on salient shared data. Despite the rise of technology platforms that allow employers to access both middle-skills and high-skills talent from across the country and even from around the world, hiring remains almost exclusively a local phenomenon. Therefore, it is critical for educators and employers to have a common understanding of the local demographics, skills inventory, and demand patterns.

A significant percentage (68%) of community colleges confirmed that they were collecting such data. (See Figure 25.) But educators were not confident that employers were doing so: Only 30% of community colleges surveyed believed that employers tracked similar data. Interestingly, almost 60% of employers responded that they were satisfied with their access to such information. That suggests employers are either not using such data or that they are not using it to make decisions in a way that is obvious to or shared with the community colleges providing them talent.

There are other blind spots in the relationship. Fewer than a quarter of community colleges report that employers provide them with adequate feedback. Moreover, only 30% of schools solicit information from their graduates about their experiences at employers, and just a little more than 10% believe employers invested adequately in understanding student perspectives.

Such feedback loops are critical to maintaining and improving any "supplier-buyer" relationship. The widespread failure to create processes for exchanging data on an ongoing basis in order to develop a shared understanding of the system's performance is clear proof that most employer-educator relationships remain distant, rather than collaborative.

The survey revealed the inadequate tracking of community college students on their experience working with local employers. Such feedback loops are critical for aligning the curriculum, providing real-time experiences, and creating better workforce-ready candidates. Yet these actions are taken seldom and often inadequately. Only 30% of community college leaders admitted to taking such actions, and only 11% believed that employers they worked with tracked the performance

Figure 25: **Little use of data on local supply of talent**

Make decisions informed by the latest data and trends: Collect and share data on the local supply for talent

Employers	Existing efforts by employers are adequate	My company's existing efforts are adequate
Collect and monitor data on local demographic trends	30%	57%
Seek feedback from employers on your community college as a partner (at least once per year)	24%	55%
Survey community college graduates on their experience at their company (at least once per year)	11%	53%

Community colleges	Existing efforts by community colleges are adequate	My community college's existing efforts are adequate
Collect and monitor data on local demographic trends	57%	68%
Seek feedback from employers on your community college as a partner (at least once per year)	55%	50%
Survey community college graduates on their experience at their company (at least once per year)	54%	30%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

of community college hires. Once again, employers in large numbers optimistically claimed satisfaction with this action: 54% believed their community college was doing this adequately, and 53% believed their organization was doing so adequately. In both cases, employers set low expectations and were quick to check off boxes claiming their expectations were met.

VIII. Collect and share data on the local demand for talent

A significant majority (62%) of community colleges confirmed that they tracked critical employment data, such as job postings. (See Figure 26.) But only 40% were confident that the employers they worked with were tracking equivalent data despite 58% of employers claiming that they did. That disparity suggests that many discussions between the two entities are neither detailed nor specific. For such partnerships to flourish, both sides need to track data, exchange insights, and agree to the implications. Unless educators, employers, and policymakers at the local and regional level work

off the same set of numbers regarding the supply and demand for talent, the development of America's skills base will continue to suffer imbalances.

The survey confirmed that there is no feedback loop between the vast majority of America's community colleges as to how well-prepared students are and what skills or aptitudes they lack. Only 10% of community colleges track retention rates of their graduates with employers. Once students graduate, few community colleges have the resources or incentives to track whether students landed jobs and if they were successful in holding positions. More importantly, only slightly more than one-third of colleges survey local employers on their hiring needs annually, and only 21% found employers' responsiveness to such inquiries adequate. The failure to seek or provide such market signals inhibit the ability of community colleges to stay abreast of employers' needs and emerging skills requirements.

Figure 26: **Inadequate sharing of data on the demand for talent**

Make decisions informed by the latest data and trends: Collect and share data on the local demand for talent

Employers	Existing efforts by employers are adequate	My company's existing efforts are adequate
Track data on job/industry trends (e.g., job/earnings growth)	40%	58%
Survey employers on their workforce needs (at least once per year)	21%	54%
Track the retention rates of employees who attended community college	10%	55%

Community colleges	Existing efforts by community colleges are adequate	My community college's existing efforts are adequate
Track data on job/industry trends (e.g., job/earnings growth)	57%	62%
Survey employers on their workforce needs (at least once per year)	55%	37%
Track the local community on its workforce needs (at least once per year)	52%	57%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

IX. Build mechanisms to jointly monitor and improve the supply and demand for talent

In keeping with the "paucity of data" theme, the survey reinforced the need to establish mechanisms that provide consistent and accurate market feedback to drive continuous improvement. Such mechanisms might start with elements like "offer career services"—which the survey revealed 64% of community colleges were offering and 62% of employers thought adequate. (See Figure 27.) However, the effectiveness of the counseling is undermined by only 36% of community college leaders indicating that they direct students to programs associated with jobs that are in high demand.

While almost two-thirds of community colleges include workforce development in their strategic plans, far fewer translate those objectives into specific performance metrics. Only 39% use job placement as an outcomes'

metric, and only one-third use graduates' wage levels as a measure. The tension between the academic mission of community colleges and their role as a skills provider is made clear in a single piece of data: Only 22% of schools report prioritizing job placement rates for graduates over graduation rates.

The review of practices against the three foundational areas revealed a consistent difference in sentiment between educators and employers for both the state and trajectory of collaboration. Both sides appeared to have a good understanding of what they wanted their partner to do, yet neither believed they were receiving what they require in sufficient measure. Clearly, more needed to be unearthed in understanding the impediments in the path to an effective partnership. In the next section, we explore the obstacles impeding the partnership between educators and employers.

Figure 27: **Inadequate engagement on matching the supply and demand for talent**

Make decisions informed by the latest data and trends: Build mechanisms to jointly monitor and improve the supply and demand for talent

Employers	Existing efforts by employers are adequate	My company's existing efforts are adequate
Offer career services	39%	60%
Counsel students to enroll in programs with the highest labor market demand	30%	58%

Community colleges	Existing efforts by community colleges are adequate	My community college's existing efforts are adequate
Offer career services	62%	64%
Embed workforce development objectives into your community college's strategic plan	55%	63%
Use job placement rate as part of your community college's outcome metrics	59%	39%
Counsel students to enroll in programs with the highest labor market demand	55%	36%
Use graduate wages as part of your community college's outcome metrics	51%	33%
Prioritize job placement rate over graduate rate as a community college outcome metric	51%	22%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

The partnership playbook

The situation for each community college is unique based on the size of the institution, the location, and the type of student body. Similarly, the situation for each employer—small, medium, or large—is distinctive based on the industry, types of jobs offered, and skills required. Nonetheless, there are a number of core principles that apply universally. To ensure that the progress is effective, community colleges and employers need to measure and calibrate their progress toward the one superordinate goal: building an effective talent pipeline such that businesses can find the talent they need and local workers can get on pathways that offer the prospect of good jobs, lifetime careers, and economic prosperity.

As a starting point, a community college or an employer should evaluate their own performance against the list of actions they are taking against rigorous, shared metrics. Their mutual objective should be to improve the system's performance. Community colleges and employers alike should be prepared to provide specific, data-based feedback. Areas of focus should include:

- Ensuring the adequacy of investment in staff and other resources to sustain a productive, on-going relationship;

- Developing standard operating procedures enhanced by technology to streamline interactions and capture data;

- Collaborating to promote attractive job opportunities and associated learning pathways;

- Sharing data on current and emerging skills requirements and the lived experiences of recent graduates.

Impediments to partnership

Interviews with community college leaders and business leaders alike revealed a plethora of issues that can inhibit collaboration—some structural, some based on perceptions, others rooted in preconceived attitudes. To identify such obstacles, we looked broadly to identify various categories of impediments. We captured these as 49 statements, grouped in 11 categories. (See Appendix III.)

- Human resources
- Institutional priorities and culture
- Facilities and financial resources
- Lack of transparency
- Lack of time
- Disconnect between college and industry
- Lack of investment
- Lack of collaborative spirit
- Perceptions
- Structural
- Unreasonable expectations

These statements were presented to community college leaders and business leaders in their respective surveys. In populating each category, we regularly inserted statements that mirrored those included in other categories. Soliciting the participants' views on important issues through several different mechanisms gave us the opportunity to confirm our findings and gave us greater confidence in our conclusions.

Signs of a Stockholm Syndrome?

The findings were sobering. (See Figure 28.) In comparing the net positive and net negative scores, several themes emerged that explained why the employer-educator ecosystem underperforms and is likely to continue to do so. Disturbingly, community college leaders, on the whole, rejected the proposition that any of these issues constituted obstacles in general. They were particularly adamant about some specific variables—a lack of time, a lack of transparency, and a disconnect with industry—as not being material issues. They were more ambivalent about some subjective categories, including perceptions, lack of a collaborative spirit, and institutional priorities and culture.

In many instances, employers had very different impressions. They, as a group, did not hold their views as strongly as their community college counterparts. But they viewed eight of the obstacles as being more

significant as impediments to collaboration than the educators—and some, particularly those related to resources, by a substantial margin.

When presented with the 49 specific statements grouped under the 11 categories of obstacles, community college leaders demonstrated far less optimism in perceiving obstacles—as the rest of this section will show in detail. Further, when responding to optional, open-response questions, both educators and employers vented about the day-to-day challenges undermining the partnership between the two. Many of those grievances were framed as criticisms of the other side. Community colleges leaders complained of seemingly trivial details—like employers providing generic company email addresses rather than specific contacts, making it difficult for educators to get fast and accurate responses. They listed other objections: Employers had unreasonable turnaround times, lacked an understanding of how community colleges work, and clung to unrealistic job requirements. Complaints from employers varied. Many reported that they were simply unable to meet community colleges' demands to hire large numbers of graduates regularly and on a predictable schedule, citing their size, industry, and profitability. Mirroring a consistent complaint of the educators, many employers complained that community college leaders do not understand their business context.

Why, then, did a majority of community college leaders disagree that there were obstacles in partnering with local employers? And if employers perceived such obstacles, why were they not doing more to overcome those problems? In analyzing the 49 statements in detail, we identified that two strong undercurrents influenced the current state and trajectory of collaboration. They were:

- ***Employers choose not to engage deeply with their local community college.*** Rightly or wrongly, employers just do not perceive community colleges as the most efficient and effective way to acquire the middle-skills talent. Senior management does not get involved; the partnerships are not strategically important. Far from viewing community colleges as an indispensable resource for meeting their emerging skills needs, most employers viewed them as one of a number of suppliers. Therefore, efforts at collaboration were limited. Intriguingly, employers seemed not to perceive that their indifferent engagement may be a principal cause the shortcomings they saw in community colleges.

Figure 28: **Differing perceptions between employers and educators on the obstacles to collaboration**

Net disagreement
this is an obstacle ← → Net agreement
this is an obstacle

Category	Community colleges	Employers
Perceptions	-7%	19%
Lack of collaborative spirit	-12%	4%
Institutional priorities and culture	-12%	19%
Lack of investment	-19%	13%
Unreasonable expectations	-22%	18%
Structural	-37%	-3%
Facilities and financial resources	-40%	7%
Human resources	-48%	16%
Disconnect between college and industry	-50%	0%
Lack of transparency	-55%	-16%
Lack of time	-63%	16%

Community colleges | **Employers**

Note: These percentages reflect the average "Net Positive Score" (NPS) across each category for each respondent. NPS is a reflection of agreement and is defined as (Strongly agree + Agree – Disagree – Strongly Disagree) / (Strongly agree + Agree + Neither agree nor disagree + Disagree + Strongly Disagree).

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

- ***Community colleges' ability to be more effective is limited by their local employers' appetite for collaboration.*** Community colleges are, in fact, in abiding need of employer engagement across the spectrum of activities needed to prepare work-force ready middle-skills workers. The scope for collaboration includes providing support for curriculum development; aiding in appointing qualified advisory committee members and faculty; offering work-based learning programs; and sharing forecasts for skills requirements. However, most community colleges have come to realize that employers are either unable or unwilling to meet such pressing needs. Over time, that has contributed to the relationship being

one founded on low exceptions. Marginal improvements are viewed as accomplishments, larger ambitions are set aside permanently. Given community colleges' needs for resources of all kinds and desire to place their graduates in good jobs, they continue to work to advance employer relationships—even though these relationships are quite inadequate.

Today, most employer-educator relationships reflect a self-fulfilling prophecy. Employers expect only a marginal return on their investment in the relationship, so they cap the investment and, thus, guarantee themselves a marginal return.

Human resources: Lack of trust

As reported earlier, both community college leaders and employers had a guarded response to the statement "Community colleges are producing work-ready employees." (See Figure 10 on page 21.) A series of statements characterizing the attitudes and capabilities of human resources laid bare some of the factors driving that outcome.

Even though 84% of those surveyed hire community college graduates, employers in the U.S. did not believe the community college system is equipped to deliver work-force ready talent. Significant percentages of employers reported that community college program

leaders have inadequate technical background to deliver state-of-the-art content. Similarly, nearly half of employers believed community colleges lack the leadership to create the workforce of the future and the staff to maintain strong employer relationships. (See Figure 29.) Many employers believed that community colleges are resistant to curricular change. Collectively, those sentiments contributed to almost 60% of business leaders reporting that community colleges lack the reputation to be attractive partners for companies "like theirs."

Community college leaders were quite self-critical and reflective. Their responses paralleled the responses of employers across multiple dimensions, ranging from

Figure 29: **Employers perceive lack of leadership and staff at community colleges**

Employers — Strongly agree → Strongly disagree | I don't know

Statement						
Community colleges are resistant to curricular changes	19%	25%	23%	17%	8%	8%
Community colleges' career and technical program leaders lack training	17%	27%	20%	18%	11%	7%
My company lacks the reputation to attract community college partners	16%	21%	18%	20%	20%	5%
Community colleges lack the reputation to attract partners like my company	18%	25%	19%	20%	13%	6%
Community colleges lack the leadership they need to create the workforce of the future	20%	23%	21%	18%	11%	7%
Community colleges lack the staff to collect and make sense of data	18%	27%	22%	16%	9%	8%
Community colleges lack staff to develop and maintain employer relationships	17%	29%	21%	17%	9%	7%

Community colleges — Strongly agree → Strongly disagree | I don't know

Statement					
My community college's faculty are resistant to curricular changes	7%	22%	21%	35%	15%
My community college's career and technical program leaders lack training	16%	11%	33%	37%	
My community college lacks the reputation to attract employer partners	9%	11%	35%	43%	
Employers lack the reputation to attract partners like my community college	3%	13%	44%	38%	
My community college lacks the leadership it needs to create the workforce of the future	8%	9%	31%	50%	
My community college lacks the staff to collect and make sense of data	8%	19%	14%	33%	26%
My community college lacks staff to develop and maintain employer relationships	12%	27%	12%	29%	20%

Note: Percentages may not sum to 100% due to rounding. Percentages less than 3% are not labeled.

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

the technical depth of their programs to the extent of their reputation to a lack of leadership to create the workforce of the future. While bracing, that clear-eyed self-evaluation suggests the extent to which community college leaders are open to forging more-effective partnerships.

Institutional priorities and culture: Ties that bind

The survey revealed that many employers no longer have faith in the basic mission of community colleges. As high as 43% of all employers surveyed agreed with the statement "Community colleges lack the mandate or culture to develop programs that align with what employers are looking for." Only 17% of employers disagreed with the statement. (See Figure 30.)

Employers also reported that their community college lacked the facilities and equipment required to train students on skills that employers were seeking. That, despite 50% or more of employers claiming they were offering the necessary support in areas like sourcing advisory committee members and faculty members and providing access to relevant assets. (See Figure 21 on page 37.)

Educators acknowledged the existence of some impediments to their being more responsive, such as service area positions, the requirement for broad accessibility, and the limitations imposed by accreditors and state departments of education. However, they rejected propositions like their schools lacking the culture or the facilities and equipment to develop programs reflecting employers' needs. That reinforces a theme discernible across the survey results—community college leaders operate under constraints that most employers do not apprehend.

Figure 30: **Employers do not recognize the constraints on community college leaders**

Employers — Strongly agree → Strongly disagree | I don't know

Statement	Strongly agree				Strongly disagree	I don't know
Community colleges lack the mandate or culture to develop programs that align with what employers like mine are looking for	16%	27%	24%	17%	10%	6%
Community colleges lack the facilities and/or equipment to train students on skills that my company is looking for	18%	26%	21%	19%	11%	6%
Community colleges have too much red tape	16%	25%	27%	15%	9%	9%
Community colleges are confined to limited "service area" policies	15%	26%	28%	14%	8%	10%

Community colleges — Strongly agree → Strongly disagree | don't know

Statement	Strongly agree				Strongly disagree	don't know
My community college lacks the mandate or culture to develop programs that align with what employers are looking for	6%	12%	11%	37%	34%	
My community college prefers employer-sponsored programs that are accessible to all students instead of only the best students	18%	39%	22%	11%	5%	5%
My community college lacks the facilities and/or equipment to train students on skills that employers are looking for	5%	16%	15%	35%	28%	
My community college has too much red tape	10%	24%	24%	30%	11%	
Official bodies (e.g., accreditors, the Department of Ed) impose requirements on community colleges that stifle innovation	15%	35%	20%	20%	8%	
My college is confined to limited "service area" policies	15%	33%	13%	23%	14%	

Note: Percentages may not sum to 100% due to rounding. Percentages less than 3% are not labeled.

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

Facilities and financial resources: Presumptions galore

Educators rejected a belief prevailing among employers that community colleges are not data driven. They disputed notions such as community colleges lack the tools to make data-driven decisions, that policies inhibit their ability to collect data, or that they lack the knowledge of what data to track or what to do with it.

Relatively equal percentages of employers and community college leaders agreed that community colleges

lack resources in key areas—such as paying enough to attract quality instructors or investing in hiring relationships with employers. In both cases, however, the underlying assumption was that it is the community colleges' responsibility to address such gaps. Relying on community colleges to rectify any such shortcomings, given the resource constraints both employers and community college leaders acknowledge, is patently unrealistic.

Many employers were prepared to assume that community college students would not be interested in working in their companies. More than half perceived

Figure 31: **Employer and educators agree on lack of funding for key resources**

Employers — Strongly agree → Strongly disagree | I don't know

Community colleges don't pay enough to attract instructors with industry experience	18%	25%	27%	13%	9%	8%
Community colleges lack the infrastructure to develop and maintain hiring relationships with employers like mine	15%	24%	24%	22%	9%	7%
Community colleges do not have a primary point of contact for hiring and recruitment relationship building with employers like mine	17%	24%	24%	18%	10%	7%
Community colleges have too small a student body to attract employers like mine as a partner	15%	18%	22%	23%	15%	6%
Community college students aren't interested in working at my company	14%	20%	22%	19%	18%	7%

Community colleges — Strongly agree → Strongly disagree | I don't know

My community college lacks funds to attract instructors with industry experience	16%	30%	15%	22%	16%
My community college lacks the infrastructure to develop and maintain hiring relationships with employers	6%	23%	12%	34%	24%
My community college does not have a primary point of contact for hiring and recruitment relationship building with employers	8%	20%	12%	38%	21%
My community college's student body is too small to attract employer partners	5%	11%	43%	39%	
My community college's students aren't interested in the companies that are hiring	7%	17%	45%	29%	3%
My community college lacks the data collection and analytical tools to make data-driven decisions	4%	11%	13%	42%	29%
My community college lacks the policies and processes for collecting data (e.g., lack of a mandatory graduation survey)	4%	20%	10%	37%	27%
My community college doesn't know what data we should be tracking	11%	16%	43%	29%	
My community college has lots of data, but we do not know what to do with this information	3%	17%	21%	37%	20%

Note: Percentages may not sum to 100% due to rounding. Percentages less than 3% are not labeled.

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

that students would be, at best, ambivalent about their firms. That almost certainly contributes to the vacillating attitude U.S. employers display when it comes to investing in deeper partnerships with community colleges. Education leaders firmly rejected that proposition: 74% disagreed that students were not interested in working for these firms. (See Figure 31.)

Lack of transparency: Candid dialogue, but limited understanding

A majority of educators and employers prided themselves on the quality of communication. Seventy-five percent of community college leaders and 54% of business leaders agreed that their discussions were honest and actionable. (See Figure 32.) Yet clearly something was amiss as the other findings hinted. For example, a

third of all employers surveyed, 36%, maintained that their community college was unwilling to share student information that helped with hiring talent. Also, far fewer employers perceived serving on industry boards as a good use of time.

A significant fault line that emerged in the findings pertained to a critical issue: initiating the hiring partnership. A third of employers surveyed reported that their company didn't know which community college to contact to initiate hiring relationships (35%) or whom to contact at the community college to initiate hiring partnerships (38%). While community colleges indicated they know how to contact companies, they complained that employers do not provide a specific contact who is responsible for managing the relationship.

Figure 32: **Employers do not value serving on industry boards as highly as educators**

Employers — Strongly agree → Strongly disagree | I don't know

	Strongly agree				Strongly disagree	I don't know
My company doesn't know which community colleges to contact to initiate hiring relationships	14%	21%	22%	22%	15%	6%
My company doesn't know whom to contact at community colleges to initiate hiring relationships	16%	22%	22%	19%	15%	7%
Community colleges are unwilling to share student information to help me to hire talent	15%	21%	23%	20%	12%	10%
Discussions with community colleges are honest and actionable	20%	34%	24%	8%	5%	8%
Serving on industry advisory boards is a good use of my company's time	22%	34%	24%	9%	6%	6%

Community colleges — Strongly agree → Strongly disagree | I don't know

	Strongly agree				Strongly disagree	I don't know
My community college lacks access to labor market and/or employment outcomes data	8%	9%	46%			35%
My community college doesn't know which employers to contact to initiate hiring relationships	3%	13%	11%	48%		24%
My community college doesn't know whom to contact at each employer to initiate hiring relationships	4%	21%	16%	39%		18%
Employers keep changing their hiring requirements without informing my college	3%	14%	25%	30%	13%	16%
Employers are asking my community college to share student information that would compromise student privacy	6%	16%	41%	27%		9%
Discussions with employers are honest and actionable	18%	57%		17%	5%	
Serving on industry advisory boards is a good use of my community college's time	40%	45%		6%	4%	3%

Note: Percentages may not sum to 100% due to rounding. Percentages less than 3% are not labeled.

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

Lack of time: Lost initiative

The survey findings repeatedly underlined why the supply and demand for middle-skills talent remains out of balance in the U.S. labor market. Community colleges lack the resources to keep pace with changes in the labor market, and employers are insufficiently engaged to make up the difference. Indeed, almost 17% of educators surveyed lamented that employers regularly change their hiring requirements without informing their school.

Despite critical middle-skills positions remaining chronically hard to fill across industries nationwide, employers showed little resourcefulness in developing approaches to filling that gap. The ennui was evident in the low expectations employers have for the partnership, their weak commitment to taking actions to foster partnerships, and their failure to recognize obstacles to progress.

Employers' lack of urgency is evident in their basic attitude toward collaboration. Nearly half of all the employers surveyed, 46%, placed the onus of initiating contact on community colleges. (See Figure 33.) Fewer than 25% assigned a principal role for initiating partnerships with community colleges to employers. Those sentiments revealed the lack of understanding of the resource constraints facing community colleges.

The perverse nature of the relationship was corroborated in our interviews with community college and business leaders. Almost every community college leader

we spoke to recounted episodes of making concerted efforts to cultivate specific employers—all usually without effect. Conversely, employers who approached community colleges universally reported receiving enthusiastic welcomes.

At the root of the aloofness displayed by many employers is skepticism about the ability of community colleges to provide relevant training and education. That is evident in almost 40% of employers responding that they did not have the time to work with community colleges on developing curricula. It is also redolent in responses shared in Figure 29 on page 48, such as community colleges lacking the reputation to attract employers like themselves or employing staff at all levels that lack adequate training.

Disconnect between college and industry

To a substantial degree, many employers' inability to harness the potential benefits of partnering with community colleges is a function of issues within their own organizations. Just over 50% of business leaders surveyed were unable to assert that they knew which skills they were hiring for: 30% flatly admitted that they did not know which skills they were looking for in new hires while another 21% neither agreed nor disagreed. (See Figure 34.) While they were critical of the skills community college graduates possess and the rate at which new hires become productive, only one in four employers could claim that they were transparent in communicating their hiring needs to educators. In contrast, 46%

Figure 33: **Weak commitment by employers to invest time in forming partnership with community colleges**
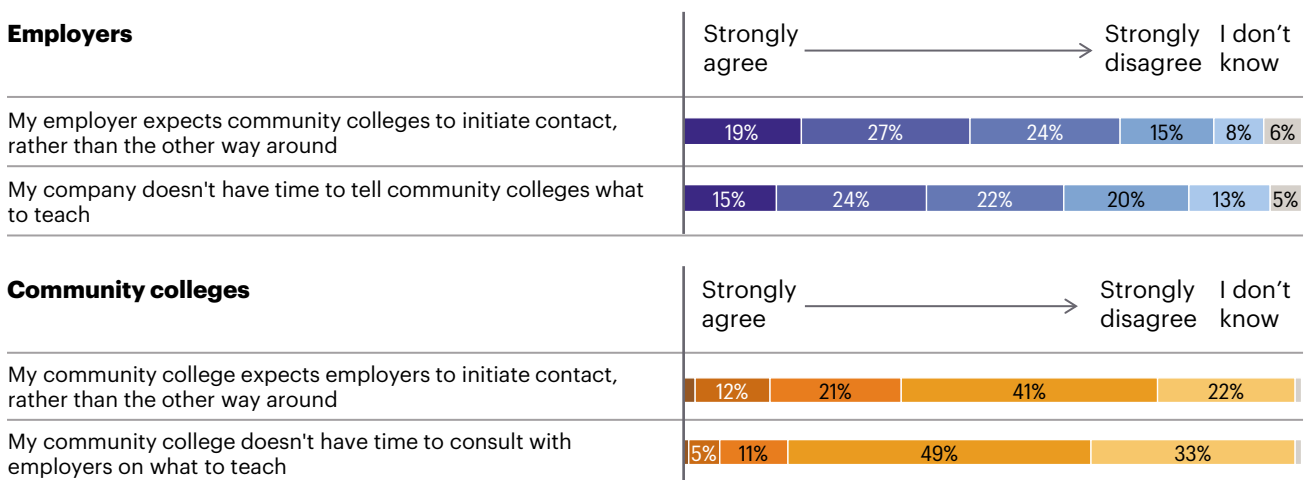
Employers	Strongly agree → Strongly disagree				I don't know
My employer expects community colleges to initiate contact, rather than the other way around	19%	27%	24%	15%	8% / 6%
My company doesn't have time to tell community colleges what to teach	15%	24%	22%	20%	13% / 5%

Community colleges	Strongly agree → Strongly disagree			I don't know
My community college expects employers to initiate contact, rather than the other way around	12%	21%	41%	22%
My community college doesn't have time to consult with employers on what to teach	5% / 11%	49%	33%	

Note: Percentages may not sum to 100% due to rounding. Percentages less than 3% are not labeled.

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

of the business leaders surveyed agreed they needed to be clearer with community colleges as to what they were looking for in applicants and 26% neither agreed or disagreed. That extends beyond technical skills to include foundational skills. Indeed, while community college leaders criticized employers for providing inadequate specifications on skills requirements, they were less harsh in that evaluation compared to the employers' own assessment.

The disconnect between employers and community colleges would seem to be driven by a lack of resources on both sides. Many employers admitted that they do not make the investments necessary to get better results. They often invoked insufficient time to provide adequate support and expressed frustration that community colleges lack the resources, skilled personnel, or curricular flexibility to compensate for that underinvestment.

Against this backdrop, making material progress will require interdicting a negative cycle of logic. Employers believe that community college graduates will inevitably prove deficient and, as a result, are unwilling to invest time and effort in addressing the shortcomings about which they complain.

Figure 34: **Lack of clear signals from employers on the skills and credentials they sought from new hires**

Employers — Strongly agree → Strongly disagree | I don't know

	Strongly agree				Strongly disagree	I don't know
My company doesn't know which skills and credentials it is looking for in new hires	10%	20%	21%	22%	22%	6%
Community college graduates lack the skills and credentials my company is looking for in new hires	15%	21%	25%	22%	12%	5%
Community college graduates take too long to reach full productivity at my company	13%	22%	23%	23%	12%	7%
My company needs to be clearer to community colleges about what we are looking for in job applicants	15%	31%	26%	13%	9%	6%
Community college graduates lack the English proficiency needed to succeed at my company	16%	17%	21%	25%	15%	6%
Community college graduates lack work authorization needed to be hired at my company	13%	19%	24%	22%	14%	8%
Community colleges are resistant to changing their curriculum to align with my company's foundational skills needs	14%	25%	25%	16%	11%	8%
Community college graduates lack the foundational skills needed to succeed at my company	17%	21%	24%	21%	12%	6%
Community colleges are resistant to changing their curriculum to align with my company's technical skills needs	16%	22%	26%	18%	10%	9%
Community college graduates lack the necessary technical skills needed to succeed at my company	16%	21%	25%	21%	13%	5%

Community colleges — Strongly agree → Strongly disagree | I don't know

	Strongly agree		Strongly disagree	I don't know
Employers don't share which skills and credentials they are looking for in new hires	14%	21%	44%	17%
Employers don't know which skills and credentials they are looking for in new hires	19%	19%	44%	14% / 3%
Employers aren't communicating which foundational skills my community college should be teaching	16%	17%	47%	17%
Employers aren't communicating which technical skills my community college should be teaching	14%	14%	50%	19%

Note: Percentages may not sum to 100% due to rounding. Percentages less than 3% are not labeled.

Lack of investment

The cycle of disengagement is also evident in employers and community colleges' respective attitudes about the economics of their relationship. As Figure 35 indicates, the two parties often had reciprocal impressions of that issue. For example, employers complained that community colleges want to charge too much for customized training programs; community colleges asserted that employers were unwilling to pay enough. Employers believed that community colleges were not interested in utilizing industry practitioners as advisers and faculty members; educators maintained that employers were unwilling to provide qualified candidates to them. Employers expressed concerns over the pro-

tection of their intellectual property; half of community colleges cited employers' lack of sharing intellectual property as an impediment to their relationship.

Just as previously cited data suggests, employers lack an understanding of the constraints affecting community colleges. Figure 35 also indicates that many educators were unaware of the considerations influencing employers' actions or were mistaken as to employers' opinions. For example, a majority of employers, 51%, endorsed the notion that students should be paid for work-based learning experiences. Only 39% of community college leaders believed that employers were willing to pay students in such programs.

Figure 35: **Little agreement as to the investments required for a stronger partnership**

Employers

	Strongly agree → Strongly disagree					I don't know

Community colleges are charging too much to develop customized programs	15%	20%	28%	16%	9%	12%
Community colleges lack interest in welcoming industry practitioners to teach in the classroom	15%	22%	25%	20%	10%	9%
Community college interns for work-based learning opportunities should be paid	17%	34%	26%	11%	7%	6%
It is unreasonable for community colleges to expect companies like mine to donate or lease equipment and facilities to community colleges	14%	25%	27%	18%	10%	6%
It is the responsibility of the employee to pay for their own upskilling	15%	24%	32%	15%	9%	6%
Community colleges lack interest in co-developing customized programs with companies like mine	13%	23%	28%	18%	8%	9%
Community colleges are asking companies like mine to share intellectual property that could compromise my company	15%	22%	24%	19%	12%	9%
Community colleges lack interest in sending students for field trips and visits	12%	22%	26%	19%	11%	10%
My company lacks safeguards to allow community college students to roam around on site	13%	23%	25%	20%	13%	7%

Community colleges

	Strongly agree → Strongly disagree					I don't know

Employers aren't willing to pay enough to develop customized programs	11%	33%	16%	24%	8%	8%
Employers lack interest in sending practitioners to community colleges to teach	5%	27%	23%	26%	8%	11%
Employers aren't willing to provide paid work-based learning experiences	6%	26%	24%	29%	10%	4%
Employers aren't willing to donate or lease equipment and facilities to community colleges like mine	3% 12%	20%	43%	16%	6%	
Employers aren't willing to invest in employee upskilling	6%	23%	22%	33%	12%	4%
Employers lack interest in co-developing customized programs with my community college	4% 16%	20%	43%	13%	4%	
Employers aren't willing to share their intellectual property in collaborations with my community college	5%	21%	27%	24%	7%	17%
Employers lack interest in opening work sites for community college field trips and visits	11%	21%	44%	18%	5%	

Note: Percentages may not sum to 100% due to rounding. Percentages less than 3% are not labeled.

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.
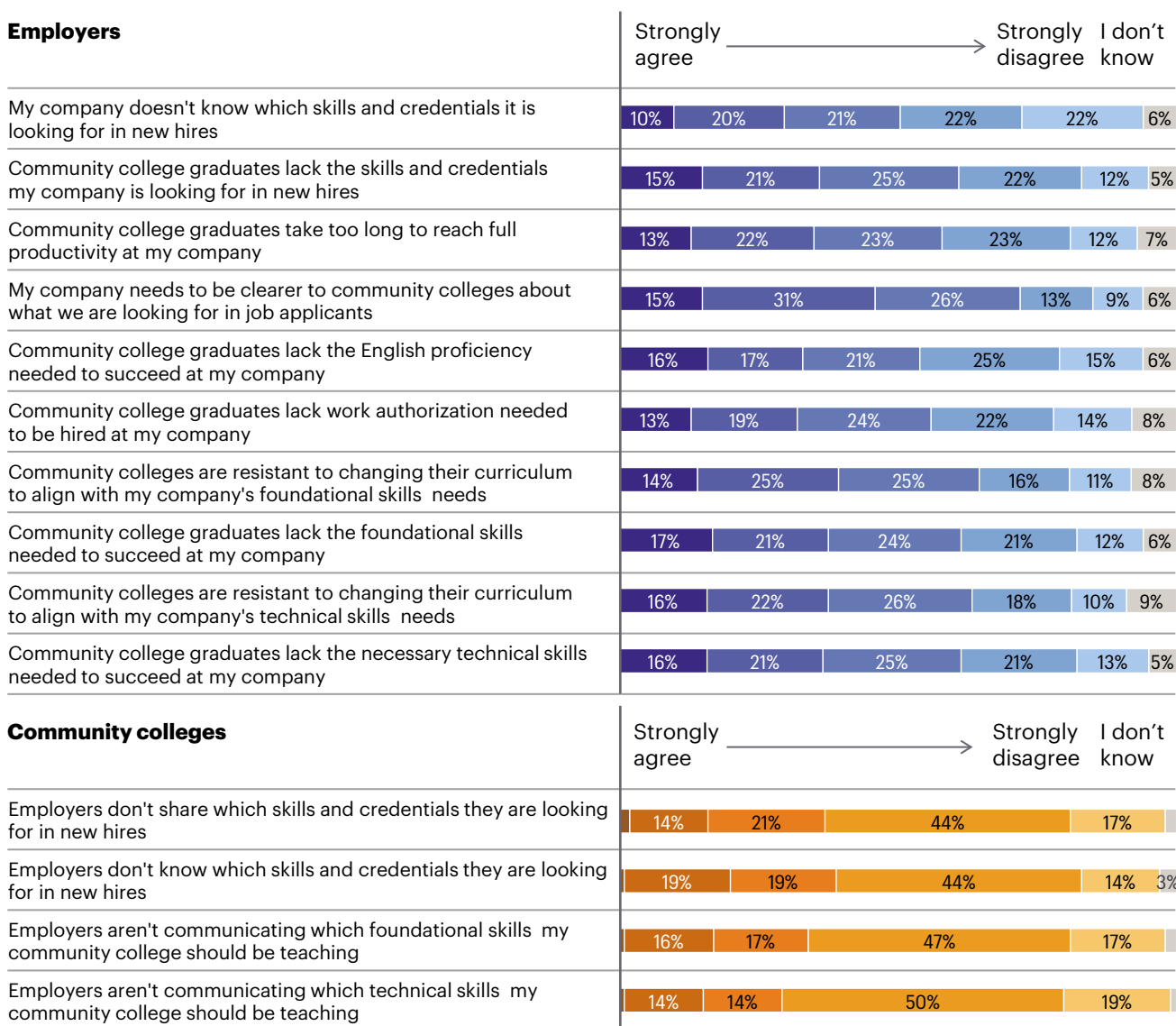
Lack of collaborative spirit

The tensions created by the overlapping—but different—interests of community colleges and businesses were apparent in Figure 36. Thirty-eight percent of companies complained that community colleges did not train for the specific skills they sought. Community colleges saw it differently: 41% of educators believed employers wanted firm-specific training that might not be transferrable. The vast majority reported that employers want them to educate students to standards specific to their companies' needs, rather than in skills transferable to other employers. Similarly, each party accused the other of being unwilling to align their calendars to their requirements.

Figure 36: **Struggle to take adequate actions for effective collaboration**

Employers

	Strongly agree → Strongly disagree					I don't know
Community colleges aren't responding to my company's emails or phone calls in a timely manner	12%	19%	25%	20%	14%	11%
Community colleges don't train for skills/equipment that my company needs	15%	23%	24%	21%	11%	7%
Community colleges are unwilling to align their academic calendars with my company's hiring schedule	13%	20%	28%	18%	10%	12%
Community colleges take too long to graduate the talent that companies like mine need	11%	21%	27%	23%	11%	7%
Community colleges aren't collecting the data I need to be an effective partner to them	12%	23%	27%	20%	9%	10%
Community colleges aren't sharing the data I need to be an effective partner to them	11%	23%	29%	17%	11%	10%
My company lacks the staff to collect and analyze data on community college hires (e.g., retention rates, skill gaps)	16%	24%	22%	19%	13%	6%
It's not worth the time and effort to collect and analyzing data on community college hires (e.g., retention rates, skill gaps)	12%	22%	24%	21%	14%	8%

Community colleges

	Strongly agree → Strongly disagree					I don't know
Employers aren't responding to my college's emails or phone calls in a timely manner	14%	20%	43%		14%	7%
Employers want my community college to train for skills/equipment that are specific to their firm and may not be transferable to other firms	6%	35%	24%	23%	6%	5%
Employers are unwilling to align their hiring schedule with my community college's academic calendar	14%	32%	27%	6%		19%
Employers keep poaching my community college students before they complete their credentials	9%	35%	27%	21%	5%	3%
Employers keep poaching my faculty members	6%	17%	54%		17%	5%
Employers aren't collecting the data I need to be an effective partner to them	20%	32%	26%	6%		14%
Employers aren't sharing the data I need to be an effective partner to them	18%	31%	34%		7%	7%

Note: Percentages may not sum to 100% due to rounding. Percentages less than 3% are not labeled.

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.
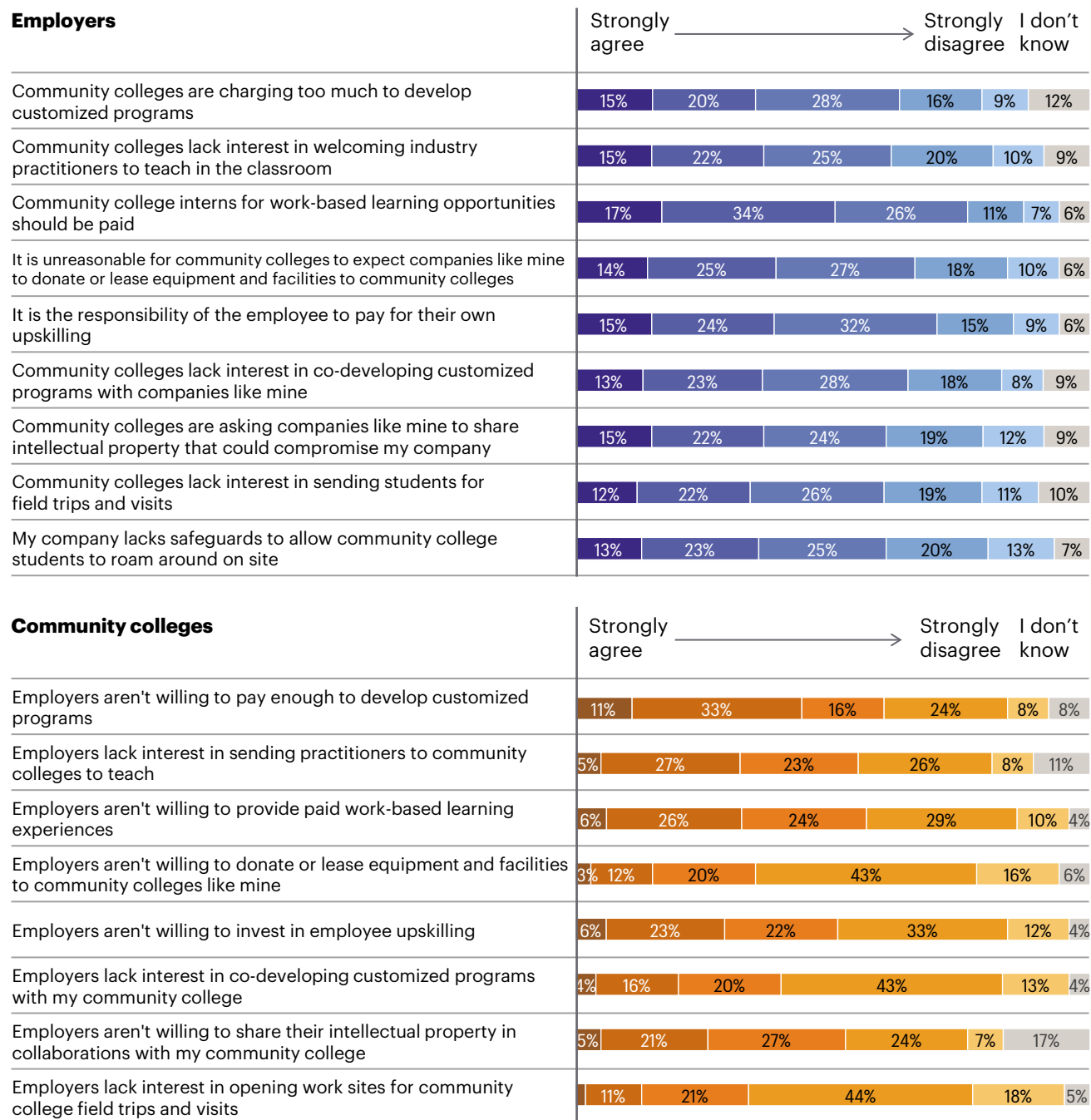
Most tellingly, community colleges objected to employers poaching students before they had completed their programs. Our field interviews confirmed that to be a recurrent phenomenon. Impatient to fill their own needs, employers can be justly accused of inflicting a penalty on the "commons," since it leads to students failing to secure a credential that might have considerable value in advancing their careers. However, employers see it through a different lens. Nearly one-third of business leaders surveyed expressed the view that community college programs take too long to complete and another 27% were neutral, leaving them with two unattractive options: suffer open positions or preemptively hire a student. The latter course of action is all the more attractive for employers in a tight labor market in which multiple competitors are seeking to fill similar positions. Employers rely on their impressions of the effectiveness of their community college hiring. One out of three business leaders surveyed believed it was not worth their time and effort to collect specific data on community college recruiting.

Perceptions: Faulty sightlines

Despite 76% of community college leaders believing that employers are willing to hire graduates and a majority (57%) rejecting the proposition that employers are biased against their graduates, the results of both surveys suggest otherwise. (See Figure 37.)

Forty-four percent of all employers surveyed believed that community college graduates were lower-quality candidates than four-year college graduates. Less than a third of employers surveyed, 30%, disagreed with that judgment.

Employers also indicated their continuing preference to hire on the spot market rather than invest time and effort in building a talent pipeline through a partnership with the local community colleges. As many as 47% of employers surveyed believed it was more cost effective to hire talent from the open market rather than invest in training new talent. Only 22% of employers disagreed. Despite the ongoing fear of a talent shortage and the widely cited low assessment of the skills available on the spot market, many employers remain reluctant to adopt a model requiring upfront investment and changing their existing recruiting practices.

Figure 37: **Employers blinded by spot hiring and degree inflation**

Employers	Strongly agree → Strongly disagree				I don't know	
Community college graduates aren't as high quality as 4-year college graduates	18%	26%	22%	18%	12%	4%
It's more cost effective to hire experienced talent from the open market than train new talent from scratch	18%	29%	28%	15%	7%	4%

Community colleges	Strongly agree → Strongly disagree				I don't know	
Employers seem more interested in hiring from 4-year colleges than from community colleges	7%	17%	23%	35%	13%	4%
Employers seem more interested in hiring experienced hires than new grads	7%	34%	23%	23%	7%	6%
Employers do not seem to be willing to hire graduates of my community college	4%	16%	47%	29%		3%
Employers discriminate in hiring, internship, and other practices	8%	17%	37%	20%	16%	

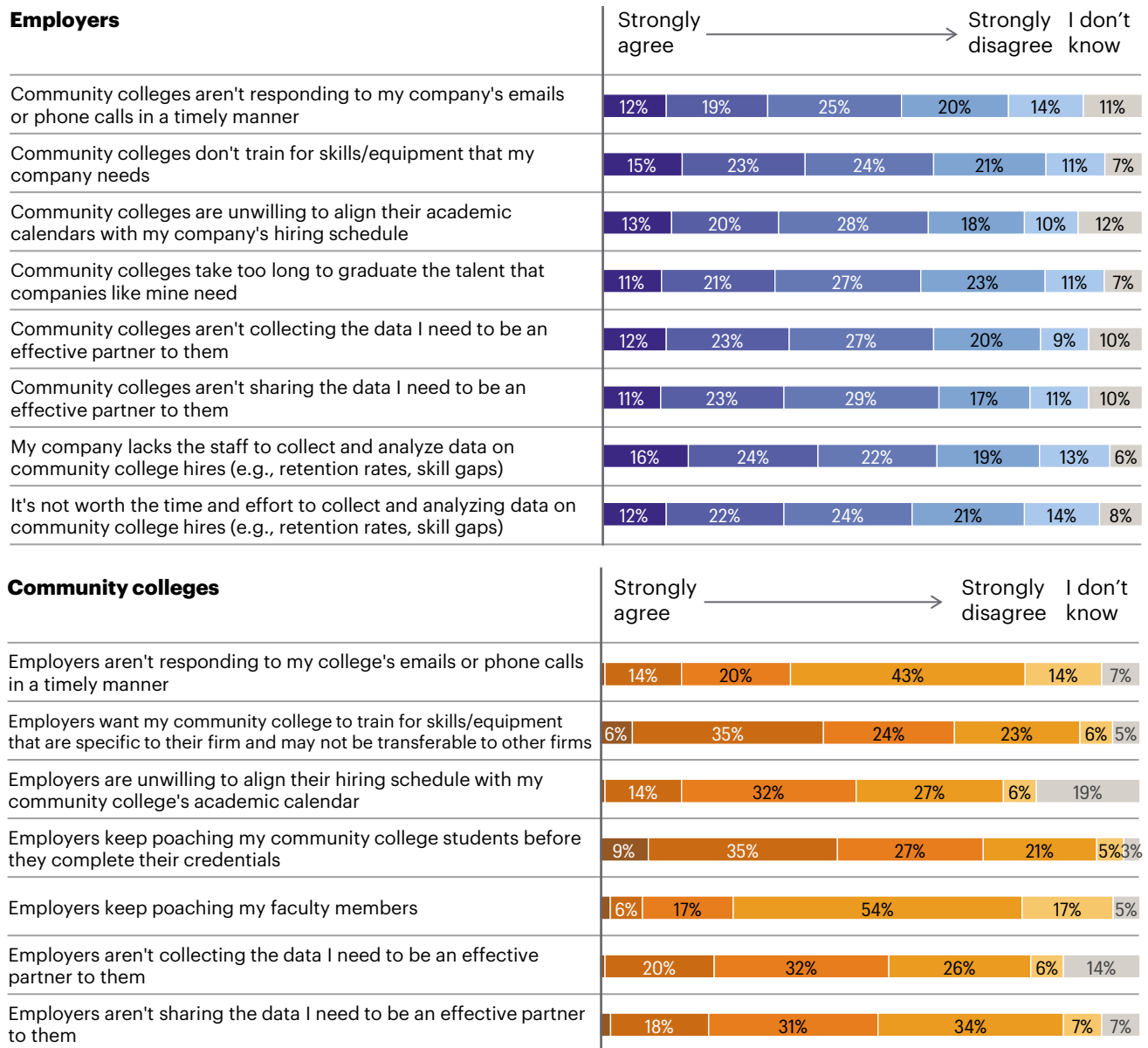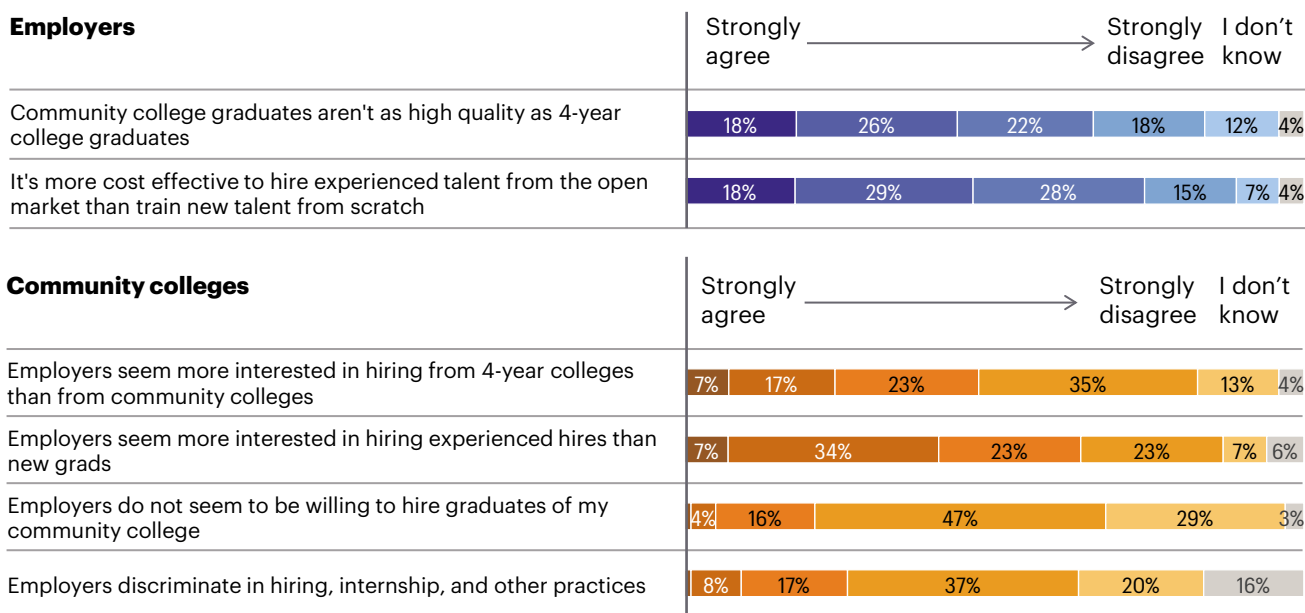Note: Percentages may not sum to 100% due to rounding.

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.
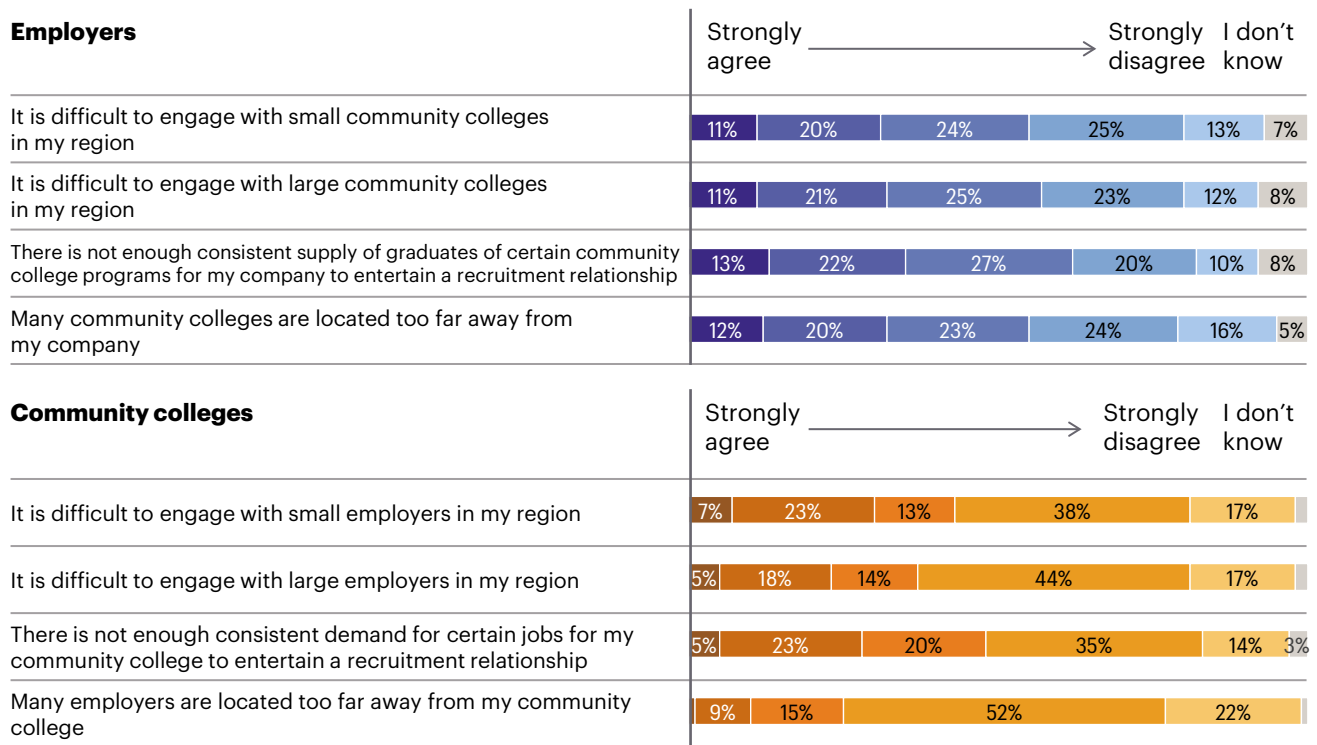
Structural issues: Divided assessments

Across the board, a majority of community colleges indicated that it was relatively easy to engage with employers, especially larger firms. Nor did they find geographic remoteness to be a major barrier to collaboration. Employers, however, were less confident with the ease of engagement with colleges. (See Figure 38.)

More problematically, both employers and community colleges opined that there was insufficient demand to sustain important programs related to certain jobs. When including those who neither agreed nor disagreed, almost half of educators answered that such

shortfalls made investing in building relationships impractical, as did nearly two-thirds of employers. Schools require a minimum number of candidates to enroll in a program consistently in order to justify the investment in faculty and any associated infrastructure. It is economically infeasible to create programs to meet temporary or cyclical spikes in demand. Such limitations constrain the ability for partnership to flourish.

Figure 38: **Despite local proximity, poor engagement between employers and educators**

Employers

	Strongly agree → Strongly disagree	I don't know

It is difficult to engage with small community colleges in my region	11% · 20% · 24% · 25% · 13%	7%
It is difficult to engage with large community colleges in my region	11% · 21% · 25% · 23% · 12%	8%
There is not enough consistent supply of graduates of certain community college programs for my company to entertain a recruitment relationship	13% · 22% · 27% · 20% · 10%	8%
Many community colleges are located too far away from my company	12% · 20% · 23% · 24% · 16%	5%

Community colleges

	Strongly agree → Strongly disagree	I don't know

It is difficult to engage with small employers in my region	7% · 23% · 13% · 38% · 17%	
It is difficult to engage with large employers in my region	5% · 18% · 14% · 44% · 17%	
There is not enough consistent demand for certain jobs for my community college to entertain a recruitment relationship	5% · 23% · 20% · 35% · 14%	3%
Many employers are located too far away from my community college	9% · 15% · 52% · 22%	

Note: Percentages may not sum to 100% due to rounding. Percentages less than 3% are not labeled.

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.
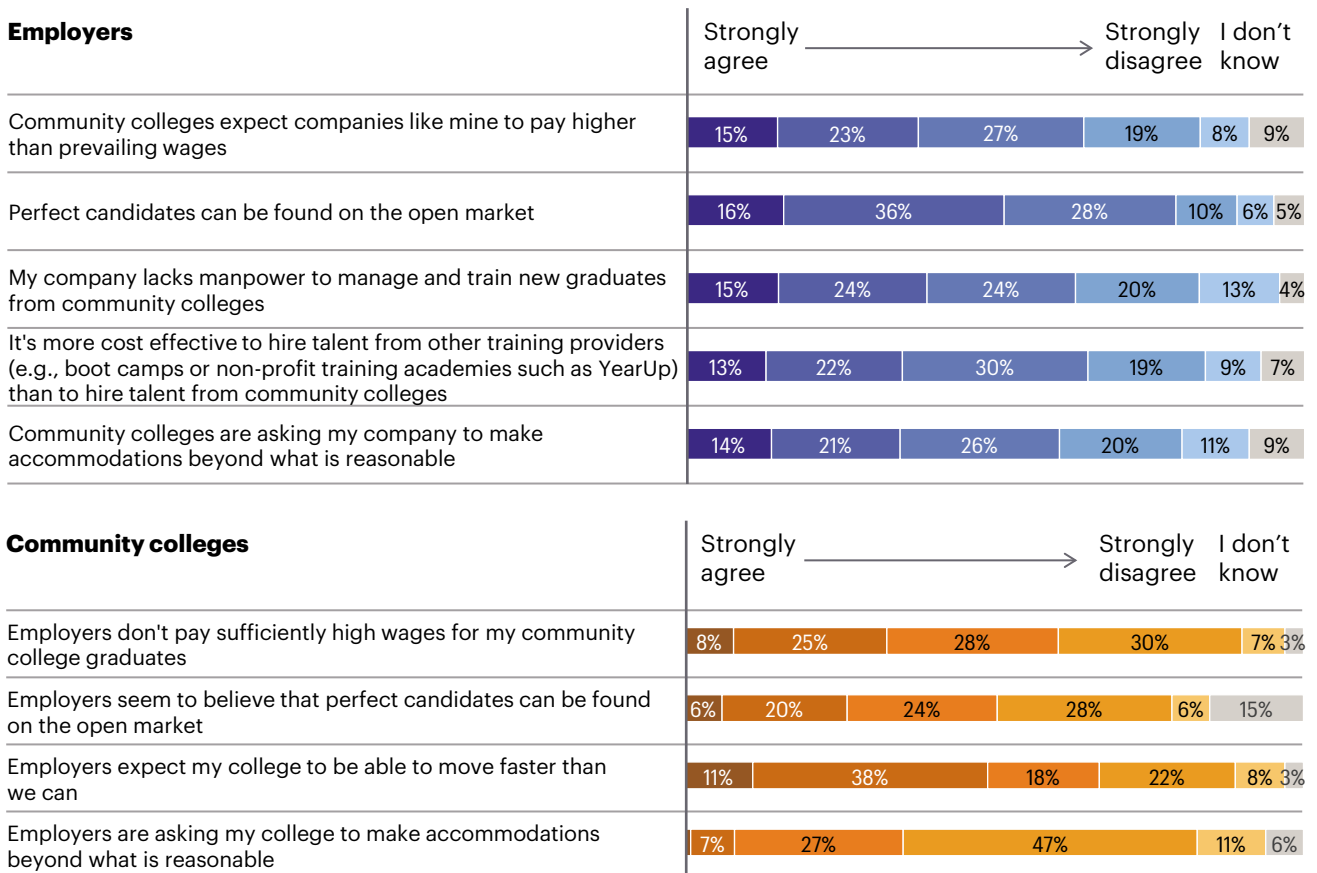
Misaligned expectations

The survey made apparent that, for most employers, community colleges represent only one of several sources of talent, and not necessarily an advantaged one. Over 50% of business leaders surveyed believed that "perfect candidates" for their open positions were available on the spot market. (See Figure 39.) Over one-third reported that training programs like bootcamps offer competitive or superior talent. Moreover, they attributed that community colleges had unreasonable expectations, including that companies should pay more than prevailing wages and should take unafford-able steps to accommodate workers.

Community college leaders confirmed the accuracy of some of those impressions. A third believed that employers did not pay their graduates sufficiently, and an additional 28% neither agreed nor disagreed. Overall, about half of educators maintained that businesses expected their institutions to react to employer requirements and demands at an unrealistic pace. In one key area, educators underestimated employer preferences. Only 26% recognized that employers pre-ferred hiring from the open market.

These findings and others from the survey strongly suggest that, while many community colleges are engaged in active and frank discussions with employ-ers, they are not addressing deep-seated concerns held by both parties. Moving the partnership to the next level will require considerably higher levels of candor.

Figure 39: **Misconceptions influence behavior rather than open, direct communications**

Employers

	Strongly agree → Strongly disagree	I don't know

Community colleges expect companies like mine to pay higher than prevailing wages	15%	23%	27%	19%	8%	9%
Perfect candidates can be found on the open market	16%	36%	28%	10%	6%	5%
My company lacks manpower to manage and train new graduates from community colleges	15%	24%	24%	20%	13%	4%
It's more cost effective to hire talent from other training providers (e.g., boot camps or non-profit training academies such as YearUp) than to hire talent from community colleges	13%	22%	30%	19%	9%	7%
Community colleges are asking my company to make accommodations beyond what is reasonable	14%	21%	26%	20%	11%	9%

Community colleges

	Strongly agree → Strongly disagree	I don't know

Employers don't pay sufficiently high wages for my community college graduates	8%	25%	28%	30%	7%	3%
Employers seem to believe that perfect candidates can be found on the open market	6%	20%	24%	28%	6%	15%
Employers expect my college to be able to move faster than we can	11%	38%	18%	22%	8%	3%
Employers are asking my college to make accommodations beyond what is reasonable	7%	27%	47%		11%	6%

Note: Percentages may not sum to 100% due to rounding. Percentages less than 3% are not labeled.

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

The partnership playbook

Employers do not perceive America's community college system as the essential source of middle-skills talent. That estimation may be in many ways fair. Indeed, community college leaders acknowledge many of their own students' limitations with praiseworthy objectivity. But it leaves employers with some inescapable questions to answer. From whom do they expect to source job-ready talent in the future locally? Many companies have aging workforces or are located in regions with stagnant or declining populations. The interstate mobility rate is at near-record lows. It would seem unwise for employers to presume that they will be able to rely on the "spot market" for talent indefinitely, especially in light of the growing level of technological dynamism.

Employers have a compelling self-interest in overcoming the obstacles that impede more productive partnership with community colleges. That implies that:

- Employers should take the initiative to set higher expectations on collaboration with educators and help local community colleges become stronger.

- They should invest in creating durable talent pipelines that rely on institutions located in the communities where they operate.

- They need to revisit the metrics they use to evaluate their investment in community colleges and retool the processes they use to assess applicants and hire and train new workers.

Community colleges have to accept that their traditional approaches are insufficient. New approaches are needed to build higher levels of trust and credibility with employers.

- They need to employ metrics on the employability of their graduates and seek feedback from employers and alumni alike on performance. Those steps will allow them to identify the gaps in technical and foundational skills that affect the graduates. In turn, specific remedial steps can be devised program by program, ideally in conjunction with committed employer partners.

- Partnering with policymakers such as mayors, county supervisors, and state workforce-development leaders, community college leaders can seek to build closer relationships with both employers and other parts of the education and training community.

The role of business in initiating partnerships

It's a theme that has been cited often in the previous pages, but it is so significant it bears repeating: *the future of building a strong partnership between America's community colleges and America's employers rests on business taking the initiative to invest more in the collaboration.* The survey included several questions related to understanding who should be taking the lead in forging more effective partnerships.
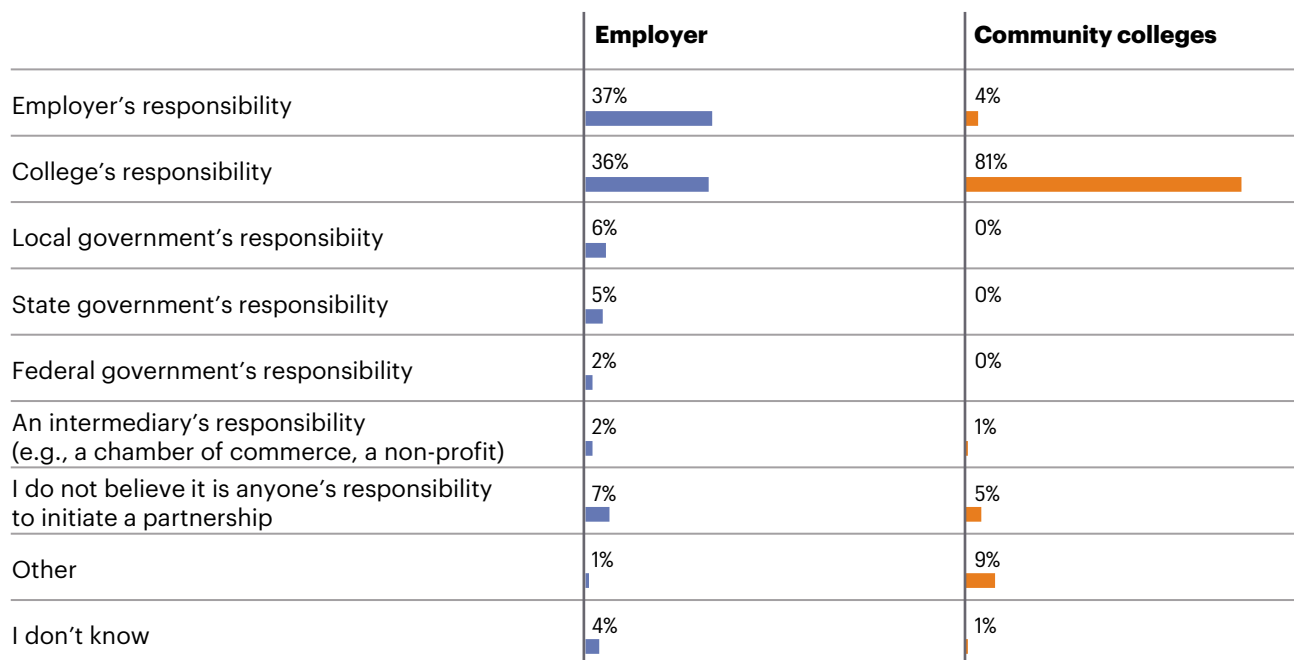
Onus on business to take the lead

Community college leaders have convinced themselves that the burden of initiating the partnership rests on them: an overwhelming 81% of the leaders surveyed believed it was their responsibility. (See Figure 40.) However, the experience of the past two decades has shown that to be an unrealistic expectation. The system will never provide workers with 21st-century skills unless the playing field between local employers and local educators is made level. Community colleges are suppliers of talent to employers; employers can be

fairly characterized as their customers. Business, therefore, must decide if it is a sound business decision to continue to underinvest in their relationship with such an important supplier of critical inputs. The survey indicates that many are prepared to acquiesce in that outcome. But if the risks to their competitiveness are as significant as many studies suggest, more employers and more groups of employers must consciously assume greater responsibility for steering and supporting this relationship.

The irony is that many business leaders are well aware of this. Only 36% of employers surveyed believed it was the community college's responsibility to reach out to them—and just a fraction more, 37%, believed it is, in fact, the employers' responsibility. It is critical that business leaders be willing to accept the mantel of leadership in a local market through institutions like the local Chamber of Commerce or at a market level through industry associations. They need to be visible and outspoken on the issue of collaborating with

Figure 40: **Burden of initiating partnership foisted on community colleges**

Whose responsibility do you believe it is to initiate college-employer partnerships?

	Employer	Community colleges
Employer's responsibility	37%	4%
College's responsibility	36%	81%
Local government's responsibiity	6%	0%
State government's responsibility	5%	0%
Federal government's responsibility	2%	0%
An intermediary's responsibility (e.g., a chamber of commerce, a non-profit)	2%	1%
I do not believe it is anyone's responsibility to initiate a partnership	7%	5%
Other	1%	9%
I don't know	4%	1%

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

local community colleges. A systems-level change will require enlisting business leaders who are undecided and, eventually, even the skeptics among the business community. Business leaders are far more likely to trust and listen to each other than any other source, when it comes to best practices.[45]

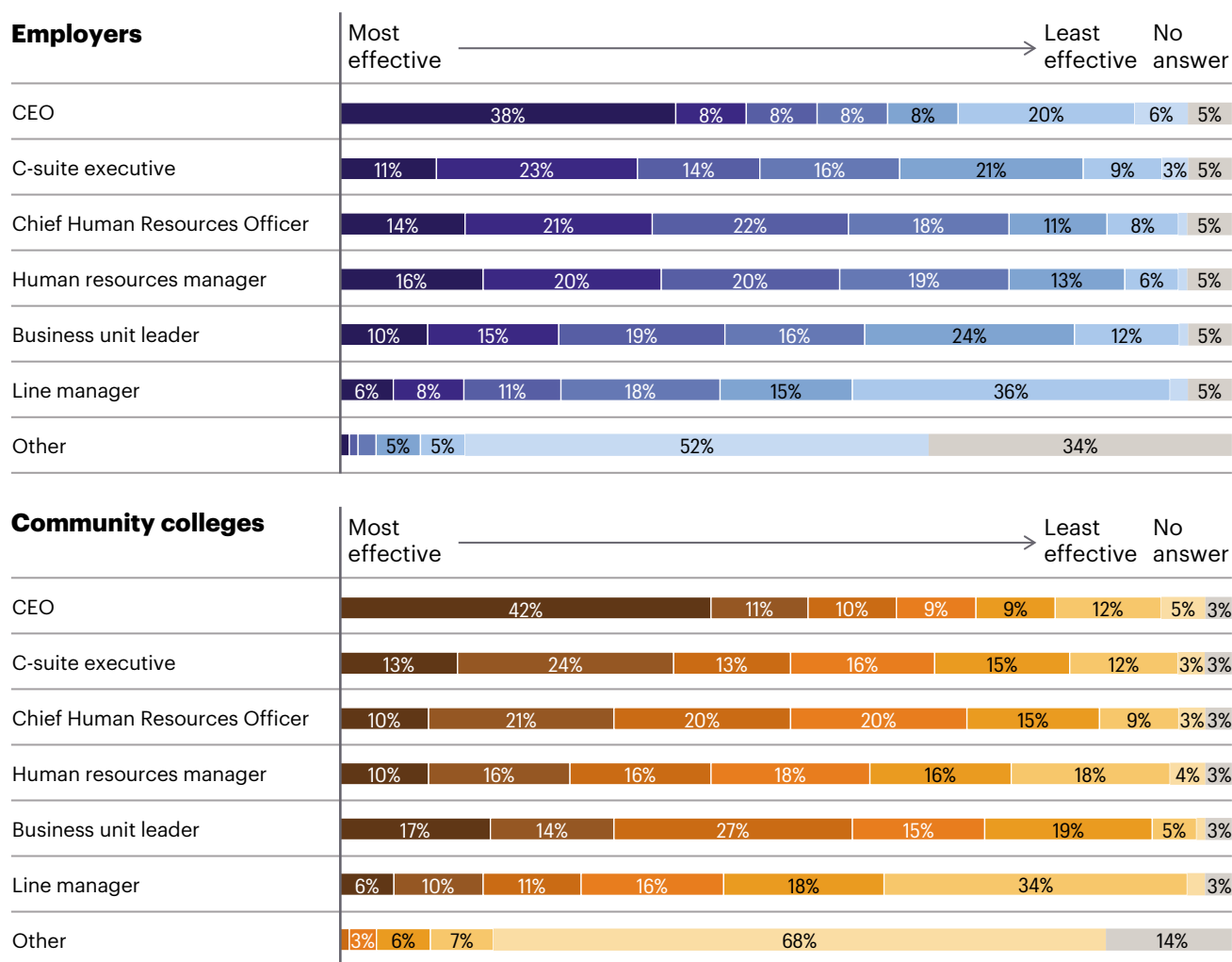## Seniority critical for initiating effective partnerships

To revitalize the employer-educator relationship, senior leaders within the organization must be involved. Regrettably, that is only occasionally the case today.

When employers and community college leaders were asked who is most effective in initiating partnerships, both recognized that CEO-level engagement was the most effective mechanism for advancing partnership. (See Figure 41.)

Two salient points to note for employers: one, the CEO's involvement was viewed as decidedly more impactful than that of any other C-suite leader. If bold, enduring change is to occur, it will require the sponsorship of a leader with wherewithal to bring it about. Two, Chief Human Resources Officers (CHRO) and particularly human resources managers possessed far less credibility. That is hardly surprising, as they are the

Figure 41: **CEO engagement critical for successful partnership**

Consider the employer-college partnerships you've observed. Please rank the following individuals <u>at companies</u> from most effective at initiating the partnership to least effective at initiating the partnership.

Employers

	Most effective → Least effective						No answer
CEO	38%	8%	8%	8%	8%	20%	6% / 5%
C-suite executive	11%	23%	14%	16%	21%	9%	3% / 5%
Chief Human Resources Officer	14%	21%	22%	18%	11%	8%	5%
Human resources manager	16%	20%	20%	19%	13%	6%	5%
Business unit leader	10%	15%	19%	16%	24%	12%	5%
Line manager	6%	8%	11%	18%	15%	36%	5%
Other		5%	5%	52%		34%	

Community colleges

	Most effective → Least effective						No answer
CEO	42%	11%	10%	9%	9%	12%	5% / 3%
C-suite executive	13%	24%	13%	16%	15%	12%	3% / 3%
Chief Human Resources Officer	10%	21%	20%	20%	15%	9%	3% / 3%
Human resources manager	10%	16%	16%	18%	16%	18%	4% / 3%
Business unit leader	17%	14%	27%	15%	19%	5%	3%
Line manager	6%	10%	11%	16%	18%	34%	3%
Other	3%	6%	7%	68%		14%	

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

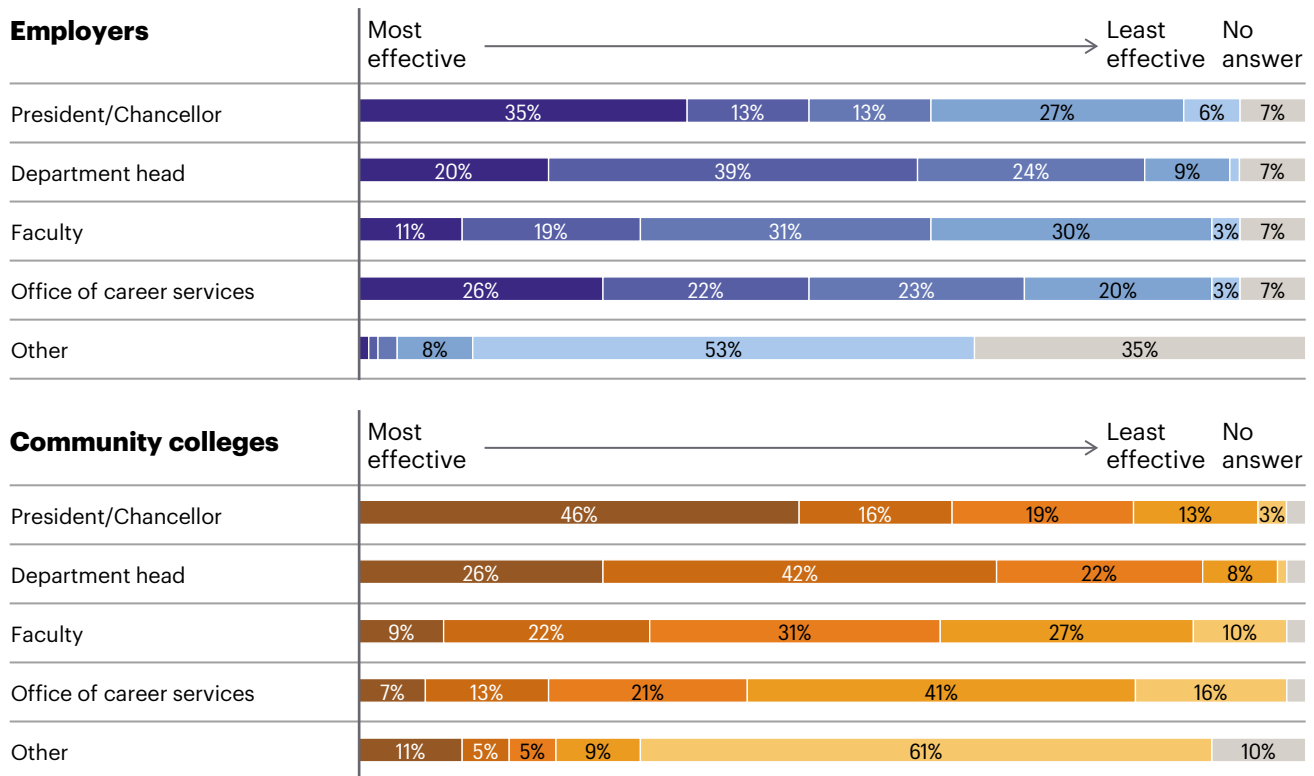overseers of the current processes that too often yield disappointing results.

When both sets of respondents were asked who would be most effective at initiating a partnership at the community college, based on their experience of employer-educator partnerships they had observed— again the preference was for the organization's leader. The largest percentage of employers, 35%, believed it was best if the partnership was initiated by the president or chancellor of the college. (See Figure 42.) The largest percentage of community college leaders, 46%, agreed. The implication was clear: if businesses and community colleges are to forge partnerships fit to address the challenges of today's economy and labor market, it will require a shared commitment by those organizations' top decision makers.

Leave implementation to middle management

Both surveys reinforced that initiating the partnership required the direct involvement of the top-most decision makers from both sides. But once a strategy was set, both employers and community college leaders believed in the actual work being done by those who are closest to the supply and demand for talent. (See Figure 43 on page 64 and Figure 44 on page 65.) When both sides were asked who they believed was the most effective at employer organizations in terms of managing the partnership, community college leaders voiced a clear preference based on their experience: 30% of the educators ranked business unit leaders as most effective, and another 24% ranked them as second most effective. Only 8% of

Figure 42: **College leadership participation necessary for effective collaboration**

Consider the employer-college partnerships you've observed. Please rank the following individuals <u>at colleges</u> from most effective at initiating the partnership to least effective at initiating the partnership.

Employers — Most effective → Least effective | No answer

President/Chancellor	35%	13%	13%	27%	6%	7%
Department head	20%	39%		24%	9%	7%
Faculty	11%	19%	31%	30%	3%	7%
Office of career services	26%	22%	23%	20%	3%	7%
Other	8%	53%			35%	

Community colleges — Most effective → Least effective | No answer

President/Chancellor	46%	16%	19%	13%	3%
Department head	26%	42%	22%	8%	
Faculty	9%	22%	31%	27%	10%
Office of career services	7%	13%	21%	41%	16%
Other	11% / 5% / 5% / 9%		61%		10%

Note: Percentages may not sum to 100% due to rounding. Percentages less than 3% are not labeled.

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.
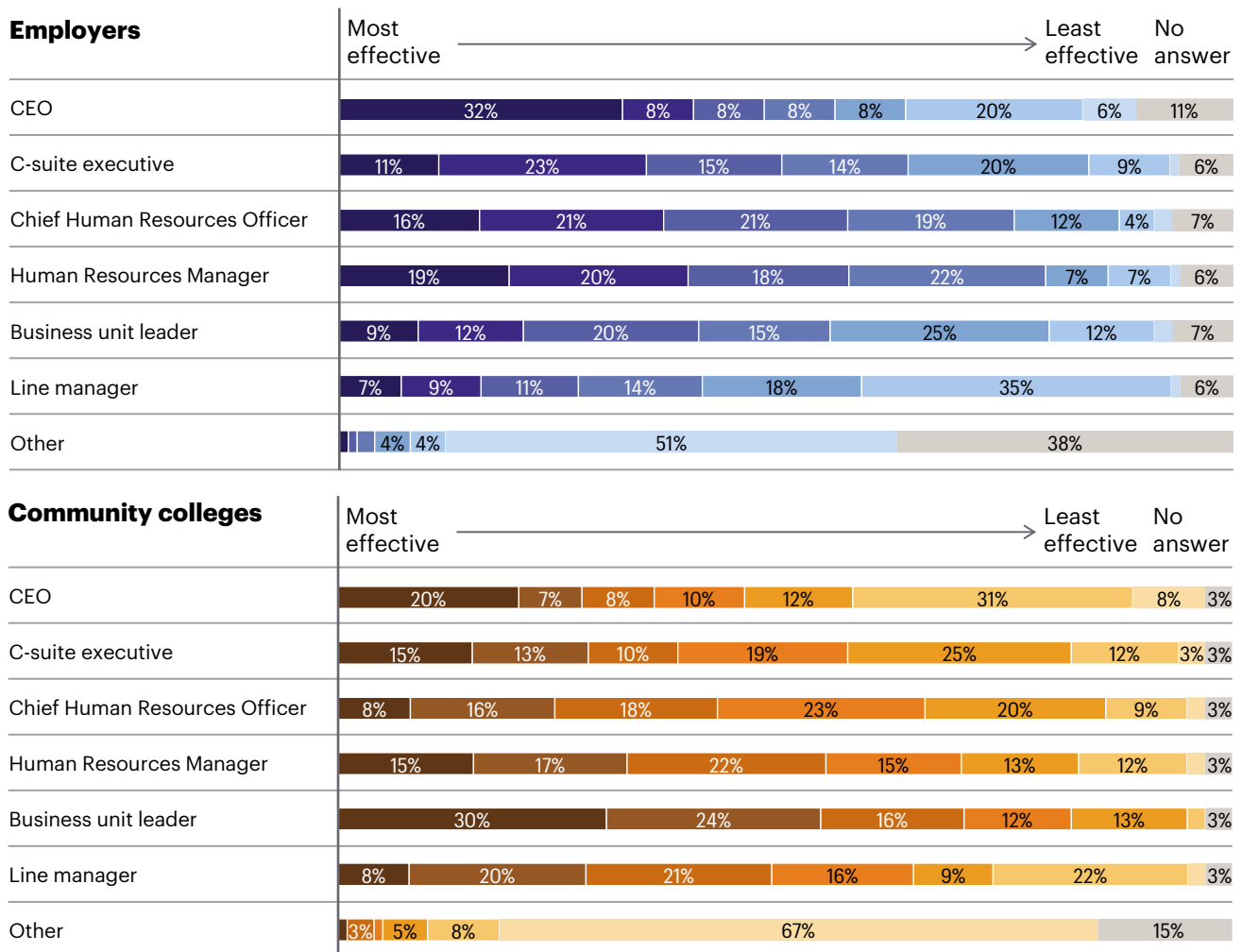
community college leaders endorsed corporate CHROs as a preferred sponsor of a partnership day to day. (See Figure 43.)

Employers showed an inclination to vest responsibility for implementing such programs with human resources professionals, namely CHROs and their subordinates. Managers were adjudged the best executives below the CEO to oversee the partnership on an ongoing basis. But previous research suggests such staff are often only marginally aware of important changes in skills driven by market and technical changes.[46] Operating managers, whether business unit leaders or line managers in businesses or faculty chairs of courses, are better versed in both what is required of a worker to be productive and how the definition of productivity is changing. They are far more likely to be able to establish an actionable definition of what is needed in the curriculum in terms of technical and foundational skills.

Figure 43: **Business unit head preferred over human resources managers by educators**

Consider the employer-college partnerships you've observed. Please rank the following individuals <u>at companies</u> from most effective at managing the partnership to least effective at managing the partnership.
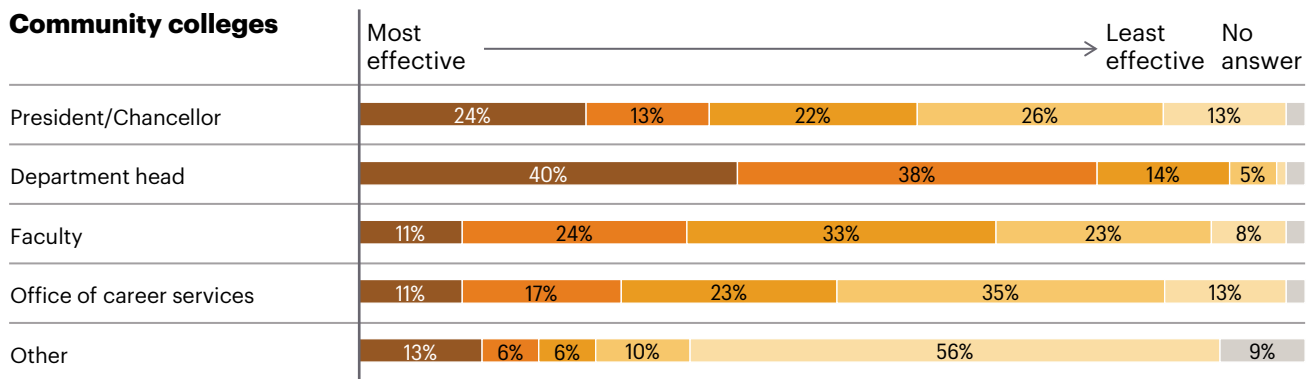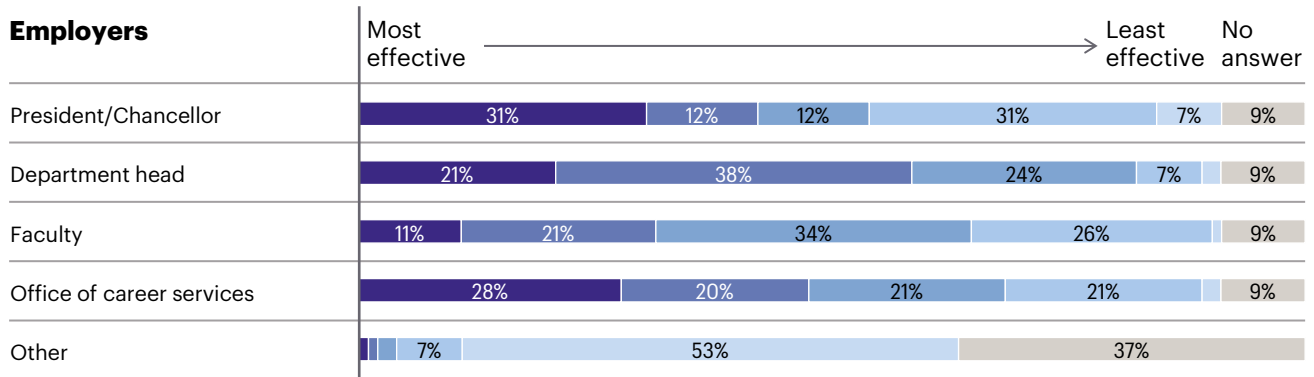

Employers (Most effective → Least effective, No answer)

Role								
CEO	32%	8%	8%	8%	8%	20%	6%	11%
C-suite executive	11%	23%	15%	14%	20%	9%		6%
Chief Human Resources Officer	16%	21%	21%	19%	12%	4%		7%
Human Resources Manager	19%	20%	18%	22%	7%	7%		6%
Business unit leader	9%	12%	20%	15%	25%	12%		7%
Line manager	7%	9%	11%	14%	18%	35%		6%
Other		4%	4%	51%		38%		

Community colleges (Most effective → Least effective, No answer)

Role								
CEO	20%	7%	8%	10%	12%	31%	8%	3%
C-suite executive	15%	13%	10%	19%	25%	12%	3%	3%
Chief Human Resources Officer	8%	16%	18%	23%	20%	9%		3%
Human Resources Manager	15%	17%	22%	15%	13%	12%		3%
Business unit leader	30%	24%	16%	12%	13%			3%
Line manager	8%	20%	21%	16%	9%	22%		3%
Other	3%	5%	8%	67%		15%		

Note: Percentages may not sum to 100% due to rounding. Percentages less than 3% are not labeled.

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

Figure 44: **Office of career services seen as more effective than faculty members by employers**

Consider the employer-college partnerships you've observed. Please rank the following individuals <u>at colleges</u> from most effective at managing the partnership to least effective at managing the partnership.

Employers

	Most effective → Least effective					No answer
President/Chancellor	31%	12%	12%	31%	7%	9%
Department head	21%	38%		24%	7%	9%
Faculty	11%	21%	34%		26%	9%
Office of career services	28%	20%	21%	21%		9%
Other	7%	53%			37%	

Community colleges

	Most effective → Least effective					No answer
President/Chancellor	24%	13%	22%	26%	13%	
Department head	40%	38%		14%	5%	
Faculty	11%	24%	33%	23%		8%
Office of career services	11%	17%	23%	35%		13%
Other	13%	6%	6%	10%	56%	9%

Note: Percentages may not sum to 100% due to rounding. Percentages less than 3% are not labeled.

Source: "The State of Collaboration Between Community Colleges and Employers – Employer Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November-December 2020 and "The State of Collaboration Between Community Colleges and Employers – College Survey," American Association of Community Colleges and Harvard Business School's Project on Managing the Future of Work, November 2020-April 2021.

The partnership playbook

- It is in the self-interest of U.S. businesses to leverage the existing resources for developing middle-skills talent.

- Business can help bridge the quality and quantity gaps in talent by initiating partnerships with local community colleges.

- In order to ensure that these partnerships are strategic and sustainable, they have to be forged at the highest level. Partnerships work best when designed, agreed to, and overseen by a corporate CEO and the president or chancellor of a community college.

- Once forged, the day-to-day management of the partnership is best left to those who are closest to understanding the demand for talent at the employers, and those who are closest to understanding the supply of talent at the community college.

- Both have to work closely to measure the program's health and effectiveness continuously, ensure both entities' concerns and constraints are understood, that objective measurements are in place, and remedial action is taken speedily.

- The CEO-president partnership can join forces to engage more local employers, helping drive scale in community college programs and ensure the growth of a more vibrant local skills and employment base.

A call to action

America's community colleges are a highly critical but woefully underappreciated resource. That must change. These institutions lie at the core of sustaining U.S. competitiveness and addressing corrosive problems such as income polarization. They hold the key to solving the middle-skills shortage that is currently constraining the ability of U.S. businesses to prosper and to grow their operations—as well as put millions of Americans on the path to economic security. As intrinsically local resources, community colleges can serve as the anchor for communities and should be at the center of any region's economic development strategies.

For all this to happen, employers have to step forward—in their own interest—to invest time and resources in fostering a relationship with their local community colleges. While there is much need for financial support—especially to upgrade the facilities, ensure that the latest equipment and licenses are available, and technical expertise is available—there is an even greater need for support in improving the outcomes generated by resources already in place. Simple, coordinated efforts, such as a common perspective on the supply and demand for middle-skills talent across industries in the region, can lead to significantly better results from existing programs, with concomitant benefits for aspiring workers, their employers, and their communities.

In the wake of COVID-19, community colleges are facing unprecedented headwinds. They have to rethink the balance between remote and in-person learning in the face of a declining student population. For many students, the calculus as to whether they should go back to school and acquire an associate's degree—while likely incurring student debt—or whether they should go back to work has become more complicated. Improving outcomes for more graduates will give prospective students greater confidence to seek the degrees or certificates that can help ensure they are qualified to seek and keep jobs that will provide them life-long economic security.

We need not wait for federal funding or changes in state policy to inaugurate these changes. Action is required at the local level—with business leaders taking the lead in reaching out to community college leaders and holding an honest conversation about their needs and challenges. Employers and educators alike have to come to understand the constraints facing the other party. That will enable each to recognize the value of seeking compromises on multiple practical dimensions in the service of generating better systemwide performance—for the education institution, for local employers, and for students.

Ultimately, it is critical that business realize that supporting local educators strengthens the commons in their localities. By furnishing high-quality training and skills development to the local workforce, community colleges provide the underpinnings that allow companies to succeed and improve standards across the board for all employers. Most importantly, by easing the transition from education to employment, community colleges provide what America desperately needs: a means to share prosperity and overcome inequality. An investment in strengthening America's community colleges can only pay rich dividends for employers, workers, and communities.

Appendix I:
Community college survey methodology

To assess the state of collaboration between America's community colleges and employers, Harvard Business School's Project on Managing the Future of Work partnered with the American Association of Community Colleges (AACC). The membership of the AACC represents nearly 1,200 two-year associate's degree-granting institutions and more than 12 million students.

The AACC distributed the survey to community college leaders between November 2020 and April 2021. The email outreach targeted top decision makers who would be closest to partnering with local employers. Of the 1,259 leaders invited to participate in the survey, 347 responded, yielding a response rate of 27%. The community college survey was a census in that all eligible persons were selected to participate.

Respondent profile

Title

President/Chancellor/CEO	193	56%
Dean/Chair/VP/Director of Workforce Development	142	41%
Provost	12	3%
Total	**347**	**100%**

Location

Midwest	91	26%
Northeast	53	15%
South	138	40%
West	65	19%
Total	**347**	**100%**

Service area of community college

City	132	38%
Suburb	82	24%
Town	34	10%
Rural	99	29%
Total	**347**	**101%***

College full-time enrollment

Small (<5,000 full-time students)	164	47%
Medium (5,000-15,000 full-time students)	125	36%
Large (>15,000 full-time students)	58	17%
Total	**347**	**100%**

*Numbers sum to more than 100% due to rounding.

Appendix II:
Employer survey methodology

A third-party survey firm conducted the employer survey between November 2020 and December 2020. The firm used an online panel methodology to gather 800 responses from business leaders from across the United States.

To ensure a broad sample of perspectives from the employer community, quotas were established across seniority level, degree of existing engagement with community colleges, employer size as measured by employee headcount, and geography. The confidence level of the employer survey is at 95% and the margin of error is estimated at -/+3.10%.

Respondent profile

Title

Senior executive	400	50%
Senior managers	240	30%
Middle managers	160	20%
Total	**800**	**100%**

Revenues

$1 billion or more	213	27%
$1 million to $25 million	162	20%
$100 million to $1 billion	174	22%
$25 million to $100 million	120	15%
Less than $1 million	131	16%
Total	**800**	**100%**

Scope of business operations

Global	219	27%
National	187	23%
Regional	133	17%
State	143	18%
Local	118	15%
Total	**800**	**100%**

Sector

Technology, IT, Digital	128	16%
Banking	65	8%
Retail	63	8%
Business Services/ Management Consulting	58	7%
Construction	42	5%
Healthcare	39	5%
Education, Training	37	5%
Insurance	30	4%
Consumer Goods and Services	29	4%
Travel and Transportation Services	23	3%
Healthcare Administration	23	3%
Engineering	20	3%
Aerospace and Defense	18	2%
Personal Services	14	2%
Pharmaceuticals, Biotechnology and Medical Research	14	2%
Automotive	14	2%
Real Estate and Rental and Leasing	13	2%
Electronics and High Tech	13	2%
Industrial Equipment	11	1%
Wholesale Trade	10	1%
Metals and Mining	10	1%
Media and Entertainment, Arts	9	1%
Chemicals	7	1%
Utilities	7	1%
Communications	6	1%
Freight and Logistics	5	1%
Agriculture	5	1%
Capital Markets	4	1%
Other	77	10%
Total	**800**	**100%**

Headquarters

Midwest	185	23%
Northeast	217	27%
South	222	28%
West	176	22%
Total	**800**	**100%**

Ownership

Private equity-backed company	97	12%
Private personally- or family-owned company	347	43%
Private venture-backed start-up	43	5%
Public company	313	39%
Total	**800**	**100%**

Employees

25,000+ employees	109	14%
15,000–24,999 employees	46	6%
10,000–14,999 employees	54	7%
5,000–9,999 employees	72	9%
2,500–4,999 employees	100	13%
1,000–2,499 employees	95	12%
50–999 employees	145	18%
1–49 employees	179	22%
Total	**800**	**100%**

Appendix III:
Key concepts in the survey instrument

Definitions provided to respondents:

"Technical skills" were defined as the ability of a community college student to perform specific tasks in one's job, such as welding, soldering, or medical sonography.

"Foundational skills" were defined as the ability to work effectively across a variety of contexts, using for example teamwork, communication, problem solving, and time management.

"Workforce-ready" was defined as the ability to perform one's job effectively due to a combination of one's technical skills and foundational skills.

1. Framework for areas of collaboration between community colleges and employers

Partner with each other to offer training and education that is aligned with industry needs.	Co-create and regularly update college curriculum around relevant technical and foundational skills based on industry needs
	Co-design programs that fit with students' lives and industry hiring cycles
	Incorporate classroom experiences that simulate real-world settings and scenarios
Establish relationships with each other that result in the recruitment and hiring of students and graduates	Dedicate staff time toward managing employer-college relationships
	Create processes for hiring community college students and graduates
	Develop commitments for hiring and recruitment
Make supply and demand decisions that are informed by the latest data and trends	Collect and share data on the local supply for talent
	Collect and share data on the local demand for talent
	Build mechanisms to jointly monitor and improve the supply and demand for talent

2. Actions for collaboration between community colleges and employers

Strategies	Community college actions	Employer actions
Co-create and regularly update college curriculum around relevant technical and foundational skills based on industry needs	Engage employers on industry advisory boards	Engage employers like yours on industry advisory boards
	Engage employers in curriculum design	Provide input to community colleges on curriculum design
	Offer industry-recognized certifications	Support community college efforts to offer industry-recognized certifications
	Offer micro-credentials (e.g., sales, IT support, service excellence)	Support community college efforts to offer micro-credentials (e.g., sales, IT support, service excellence)
	Help students obtain professional licenses	Support community college efforts to help students obtain professional licenses
	Teach foundational skills in the curriculum	Support community college efforts to teach foundational skills in the curriculum
	Teach technical skills in the curriculum	Support community college efforts to teach technical skills in the curriculum
	Offer workplace writing courses	Support community college efforts to offer workplace writing courses
	Offer workplace applied math courses	Support community college efforts to offer workplace applied math courses
	Offer workplace verbal communication courses	Support community college efforts to offer workplace verbal communication courses
	Develop standards for what skills and knowledge students can expect to acquire in their classes	Co-develop standards for what skills and knowledge students can expect to acquire in their community college classes
	Offer English for Speakers of Other Languages (ESOL courses)	Support community college efforts to offer English for Speakers of Other Languages (ESOL courses)
	Offer English for Speakers of Other Languages (ESOL courses) aligned with specific professions or industries	
Co-design programs that fit with students' lives and industry hiring cycles	Offer programs to help workers currently in the workforce upgrade their skills	Send current workers to upgrade their skills at community colleges
	Offer customized programs for companies' employees	Work with community colleges to offer customized programs for company employees
	Develop program calendars that are convenient for employers and learners (e.g., weekend classes, night time courses)	Support community college efforts to develop program calendars that are most convenient for employers and learners (e.g., weekend classes, night time courses)
	Offer credit for students' prior knowledge	[Question not asked of employers due to lack of relevance]
	Offer credit for students' prior work experience	[Question not asked of employers due to lack of relevance]

Strategies	Community college actions	Employer actions
Incorporate classroom experiences that simulate real-world settings and scenarios	Source industry practitioners to teach community college courses	Offer industry practitioners to teach at community college courses
	Offer job-site visits for community college students	Offer job-site visits for community college students
	Source projects that reflect real-world work from employers for community college class curriculum	Offer class projects that mimic real-world work for community college courses
	Offer non-credit-bearing experiential learning opportunities (e.g., volunteer, job shadowing, internship opportunities)	Support community college efforts to offer non-credit bearing experiential learning opportunities (e.g., volunteer, job shadowing, internship opportunities)
	Offer credit-bearing experiential learning opportunities (e.g., for-credit co-op programs, for-credit apprenticeship programs)	Support community college efforts to offer credit-bearing experiential learning opportunities (e.g., for-credit co-op programs, for-credit apprenticeship programs)
	Enlist industry practitioners to train community college instructors (utilize "train the trainer" models)	Enlist industry practitioners to train community college instructors (utilize "train the trainer" models)
	Solicit donated or leased equipment or software licenses from employers	Donate or lease equipment or license software to community colleges
	Create work-based or learn-and-earn opportunities	Create work-based or learn-and-earn opportunities for community college students
Dedicate staff time toward managing employer-college relationships	Assign a team or individual to manage community college-employer partnerships	Assign a team or individual to manage community college-employer partnerships
	Establish partnerships for employers to recruit and hire from your community college	Establish partnerships for employers to recruit and hire from community colleges
	Partner with employers where your graduates work	Partner with community colleges that your employees come from
	Encourage community college faculty to build relationships with recruiters and hiring managers	Encourage recruiters and hiring managers to build relationships with community college faculty

Strategies	Community college actions	Employer actions
Create processes for hiring community college students and graduates	Deploy technology to facilitate contact between community colleges and employers (e.g., Handshake, Salesforce, etc.)	Deploy technology to facilitate contact between community colleges and employers (e.g. ,Handshake, Salesforce, etc.)
	Offer in-person or virtual sessions for community college students to meet with recruiters and hiring managers	Offer in-person or virtual sessions for community college students to meet with recruiters and hiring managers
	Work with employers to establish policies, recruiting calendars, standard procedures, and/or hiring best practices	Work with community colleges to establish policies, recruiting calendars, standard procedures, and/or hiring best practices
	Offer career services (resume/cover letter writing, job-search fundamentals)	Support community college efforts to offer career-building support services (resume/cover letter writing, job-search fundamentals)
Develop commitments for hiring and recruitment	Commit to job guarantees for community college graduates (employer commitments to hire a fixed number of students per cycle)	Commit to job guarantees for community college graduates (employer commitments to hire a fixed number of students per cycle)
	Commit to hiring targets for community college graduates (employer commitments to hire an approximate number of students per cycle)	Commit to hiring targets for community college graduates (employer commitments to hire an approximate number of students per cycle)
	Establish employer-funded scholarship programs for community college students	Establish employer-funded scholarship programs for community college students
	Solicit employment opportunities for community college-wide job boards	Post employment opportunities on community college-wide job boards
	Solicit employment opportunities on academic department-specific job boards	Post employment opportunities on academic department-specific job boards
	Co-design marketing campaigns with employers to attract students to community college programs	Co-design marketing campaigns with community college to attract students to programs
Collect and share data on the local supply for talent	Collect and monitor data on local demographic trends	Collect and monitor data on local demographic trends
	Seek feedback from employers on your community college as a partner (at least once per year)	Seek feedback from community college leaders on your company as a partner (at least once per year)
	Survey community college graduates on their experience at their company (at least once per year)	Survey employees who attended community college on their experience at your company (at least once per year)

Strategies	Community college actions	Employer actions
Collect and share data on the local demand for talent	Survey employers on their workforce needs (at least once per year)	Survey the local community on its workforce needs (at least once per year)
	Track the local community on its workforce needs (at least once per year)	
	Track data on job/industry trends (e.g., job/earnings growth)	Track data on industry trends (e.g., changing nature of jobs in your industry)
		Track the retention rates of employees who attended community college
Build mechanisms to jointly monitor and improve the supply and demand for talent	Use job placement rate as part of your community college's outcome metrics	[Question not asked of employers due to lack of relevance]
	Use graduate wages as part of your community college's outcome metrics	[Question not asked of employers due to lack of relevance]
	Prioritize job placement rate over graduation rate as a community college outcome metric	[Question not asked of employers due to lack of relevance]
	Embed workforce development objectives into your community college's strategic plan	[Question not asked of employers due to lack of relevance]
	Counsel students to enroll in programs with the highest labor market demand	Support community college efforts to counsel students to enroll in programs with the highest labor market demand

3. Obstacles to collaboration between community college leaders and employers

Category	Obstacle
Human resources	(My) community college's faculty are resistant to curricular changes
	(My) community college's career and technical program leaders lack training
	(My) community college lacks the reputation to attract employer partners
	Employers (community colleges) lack the reputation to attract partners like my community college (company)
	(My) community college lacks the leadership it needs to create the workforce of the future
	(My) community college lacks the staff to collect and make sense of data
	(My) community college lacks staff to develop and maintain employer relationships
	(My) community college lacks the mandate or culture to develop programs that align with what employers (like mine) are looking for
Institutional priorities and culture	(My) community college lacks the facilities and/or equipment to train students on skills that employers (my company) are looking for
	(My) community college has too much red tape
	(My) community college is confined to limited "service area" policies
Facilities and financial resources	(My) community college lacks funds to attract instructors with industry experience
	(My) community college lacks the infrastructure to develop and maintain hiring relationships with employers (like mine)
	(My) community college does not have a primary point of contact for hiring and recruitment relationship building with employers (like mine)
	(My) community college's student body is too small to attract employer partners (like mine)
	(My) community college's students aren't interested in the companies that are hiring
Lack of transparency	(My) community college doesn't know whom to contact at each employer to initiate hiring relationships
	Employers keep changing their hiring requirements without informing my college/My company doesn't know whom to contact at community colleges to initiate hiring relationships
	Employers are asking my community college to share student information that would compromise student privacy/Community colleges are unwilling to share student information to help me to hire talent
	Discussions with employers/community colleges are honest and actionable
	Serving on industry advisory boards is a good use of my company's/community college's time

Category	Obstacle
Lack of time	My community college/employer expects employers/community colleges to initiate contact, rather than the other way around
	My community college doesn't have time to consult with employers on what to teach/my company doesn't have time to tell community colleges what to teach
Disconnect between college and industry	My company doesn't know/employers don't share which skills and credentials they are looking for in new hires
	Employers aren't communicating which foundational skills my community college should be teaching/community colleges are resistant to changing their curriculum to align with my company's technical skills needs
	Employers aren't communicating which technical skills my community college should be teaching/community college graduates lack the necessary technical skills needed to succeed at my company
Lack of investment	Employers aren't willing to pay enough to develop customized programs/ community colleges are charging too much to develop customized programs
	Employers/community colleges lack interest in sending/welcoming practitioners to community colleges to teach
	Employers aren't willing to provide paid work-based learning experiences/ community college interns for work-based learning opportunities should be paid
	Employers aren't willing to donate or lease equipment and facilities to community colleges like mine/it is unreasonable for community colleges to expect companies like mine to donate or lease equipment and facilities to community colleges
	Employers aren't willing to invest in employee upskilling/it is the responsibility of the employee to pay for their own upskilling
	Employers/community colleges lack interest in co-developing customized programs with my community college/company
	Employers aren't willing to share their intellectual property in collaborations with my community college/community colleges are asking companies like mine to share intellectual property that could compromise my company
	Employers/community colleges lack interest in opening work sites/sending students for community college field trips and visits

Category	Obstacle
Lack of collaborative spirit	Employers/community colleges aren't responding to my college's/company's emails or phone calls in a timely manner
	Employers want my community colleges to train for specific skills/equipment that may not be transferable to other firms/Community colleges don't train for skills/equipment that my company needs
	Employers/community colleges are unwilling to align their hiring schedule/academic calendars with my community college's academic calendar/my company's hiring schedule
	Employers keep poaching my community college students before they complete their credentials/community colleges take too long to graduate the talent that companies like mine need
	Employers/community colleges aren't collecting the data I need to be an effective partner to them
	Employers/community colleges aren't sharing the data I need to be an effective partner to them
Perceptions	Employers seem more interested in hiring from 4-year colleges than from community colleges/community colleges graduates aren't as high quality as 4-year college graduates
	Employers seem more interested in hiring experienced hires than new grads/It's more cost effective to hire experienced talent from the open market than train new talent from scratch
Structural	It is difficult to engage with small employers/community colleges in my region
	It is difficult to engage with large employers/community colleges in my region
	There is not enough consistent demand/supply for certain jobs/graduates of certain programs for my community college/company to entertain a recruitment relationship
	Many employers/community colleges are located too far away from my community college/company
Unreasonable expectations	Employers don't pay sufficiently high wages for my community college graduates/community colleges expect companies like mine to pay higher than prevailing wages
	(Employers seem to believe that) perfect candidates can be found on the open market
	Employers/community colleges are asking my college/company to make accommodations beyond what is reasonable

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