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Bridging the Talent Gap through Data Insights and Community Action

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THE RELATIONSHIP BETWEEN WORK AND EDUCATION

One of the most profoundly meaningful—and frustratingly difficult—issues emerging in the workplace is how to establish a constructive relationship between work and education. For years, employers have extolled the virtues of a workforce with postsecondary credentials while decrying their lack of access to workers with the right skills at the right time. Education providers, on the other hand, are struggling to keep up with the needs of employers as technology and industries change rapidly. In the middle are the workers, often alone in determining the new skills they might need to stay productive and competitive in their current or future employment. The Graduate! Network and its Bridging the Talent Gap initiative operate in the crux of this tension, providing insight and expertise for responsive, data-driven solutions.

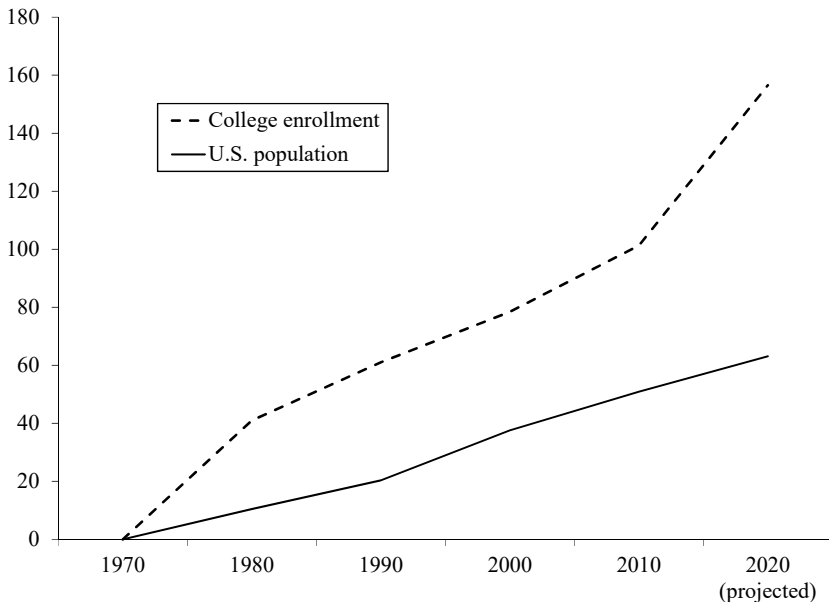
The ability to acquire, grow, and repurpose talent has become, arguably, the key driver of economic success for cities, regions, and states today. “Statistically, educational attainment—summarized by the fraction of the adult population with a four-year college degree—explains roughly 60 percent of the variation in per capita incomes among large U.S. metropolitan areas.”¹ The sizable impact of higher education prompted the national educational attainment goal of 60 percent of

adults with a postsecondary credential laid out by the Lumina Foundation.² Yet, at current degree production rates, the United States will fall 16.4 million degrees short of the 40.6 million degrees that are conservatively predicted necessary to meet the needs of the economy by 2025 (Lumina Foundation 2016). Many states, regions, and cities have now articulated similar educational attainment goals for meeting their economic development aspirations. Employers also increasingly and explicitly tie postsecondary credentials to recruiting and internal promotions. According to a Center on Education and the Workforce report (Carnevale, Jayasundera, and Gulish 2016), more than 99 percent of jobs gained in the post-2008 recovery went to workers with more than a high school education. And for the first time in our nation's history, workers with a bachelor's degree or higher make up a larger segment of the workforce than those with a high school diploma or less. Reflecting public perception of the importance of postsecondary education, data from the National Center for Education Statistics (2016) show an increase in college enrollments among all age groups. As seen in Figure 3.1, college enrollment since 1970 has grown at a substantially faster rate compared to the U.S. population. Postsecondary achievement is now a fundamental factor in the economic development aspirations of any region, for business success and for employability and personal advancement.

RESPONSES TO TALENT DEVELOPMENT NEEDS

This hunger for talent requires a tectonic shift in the way cities and regions must think about cultivating the talent they need. Once viewed as less critical compared to talent attraction and retention, incumbent worker training and workforce development are suddenly in the spotlight of economic development priorities. Typically, local governments, businesses, and other organizations invest heavily in two core talent strategies: 1) a “grow our own” strategy through the K–12 education system, and 2) an “import more” strategy through talent attraction and retention efforts. But there is a third strategy that has too often been neglected: “transform our own.” This strategy requires expanding the talent agenda to include an asset that is not fully harnessed in most

Figure 3.1 Percentage Change by Decade, College Enrollment versus U.S. Population (compared to 1970)



SOURCE: Higher Education General Information Survey, 1970 and 1980; Integrated Postsecondary Education Data (various years); Current Population Survey, selected years, 1970–2014.

NOTE: Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more two-year colleges and excludes a few higher education institutions that did not grant degrees. Some data have been revised from previously published figures.

locations: adults with some college but no degree. Around 36 million Americans fit this definition, most with extensive, valuable, and documentable work experience (Census Bureau 2016). Already part of the way to a degree, these are individuals whose workforce potential can be boosted fairly quickly with a postsecondary credential. This group is the most viable path to meeting talent goals: they are already partway there. Adults tend to bring their new skills to work immediately, and with the right supports, their educational completion rates equal or top those of the average younger learner. Finally, investing in this popula-

tion is transformative for the current and future well-being of their children as well as for higher education in the United States. The centrality of the “transform your own” strategy in successful talent development was identified early on by Dan Ash in his work with Metropolitan College (Riggert et al. 2004) and by the Philadelphia Workforce Investment Board (2005, 2007).

The Graduate! Network is a growing national network that—through raising awareness, articulating value, demonstrating ways to accelerate attainment, and mobilizing communities to action—aims to increase the number of adults completing college. Different locales require different strategies that must be driven by local stakeholders, including business, higher education, government, organized labor, workforce and economic development, community-based organizations, social service providers, and the adult learner population. No single entity can accomplish such large-scale movement. The Graduate! Network helps mobilize and connect communities around the country that recognize the potential of this population and of the organization’s approach to work together to define goals, align resources, remove barriers, and create new pathways for these adults. The following section describes select findings from the Bridging the Talent Gap project and provides recommendations for employers and individuals to embrace and benefit from the “transform your own” strategy.

BRIDGING THE TALENT GAP: SHARED EMPIRICAL DATA AS THE EMPLOYER’S VOICE

From the outset, one of the project’s key objectives was gaining the employer’s voice in this transformation strategy. Bridging the Talent Gap is designed as a platform to understand the forces at play in small and medium-sized employers as well as the large employers so often the focus of such work and studies.

The Bridging the Talent Gap approach is founded at the intersection of two countervailing forces. Collaborative talent development (CTD) enterprises like Graduate! Network communities need reliable data to understand the ways in which employers partner with employees in education support. Consequently, understanding the local community

landscape of these relationships is also a crucial step toward effective practices. Unfortunately, this understanding is compromised by the lack of quality, diminished extent, and limited usefulness of available data from employers.

These deficiencies stem from fundamental properties of traditional business models. At its core, business relies on information as a competitive advantage. “Sound business practices” dictate that the sharing of information that imparts a competitive benefit runs counter to the gains business inherently seeks. This culture of data hoarding has had a profound influence on what we know about employer-based support for learning. The scarcity of data leads to overreliance on large national databases, self-published and self-interested studies, and easily accessible Internet reports that can lack context and rigorous analysis. An in-depth, comparative overview of the characteristics of these data sources underscores important problems that need to be addressed.

- **Restricted range of benefits.** Tuition assistance, the benefit most thoroughly considered in published reports, is only one of the multiple means by which employers provide a work environment more conducive to working learners’ success. Flexible work schedules, transparency of benefit opportunities, learning opportunities at the work site and during work hours, and child care assistance are just a few alternative examples. Any profile of the ways in which employers and working learners seek mutual benefit must include a more comprehensive survey of these benefits.
- **Overinclusion.** Data sources on tuition assistance programs typically provide a national overview rather than the nuanced understanding of benefits that would be useful for local communities. A community’s economic conditions, workforce characteristics, size, employment opportunities, and a multitude of additional variables serve to define the reality of what does and does not work well for a given employer. Arguably, the failure to replicate outstanding successes such as UPS’s Metropolitan College and Verizon Wireless’s Learning Link is more a function of corporate culture and the unique characteristics of these programs, the working learners participating in the programs, and the communities in which they are located rather than any

general problematic characteristic. Collapsing data across broad ranges of location, function, and size restricts applicable insight.

- **Replicability, reliability, and validity.** The methodological deficiencies of many reports readily available on the Internet are so numerous that resulting publications often resemble a marketing piece with little substance or usable information. For many data sources found on websites, there is scant discussion of research methodology, sampling procedures, or substantive rationale for the use of statistics covered in the reports.
- **Employer exclusion based on size.** Given that gathering data among a small number of large organizations is more straightforward and requires fewer resources than a large number of smaller organizations, much of the data used in these reports focuses on employers with more than 2,500 “eligible employees.” The reality of the U.S. workforce is not consistent with this approach. According to the U.S. Small Business Administration, small businesses have provided 55 percent of all jobs and 66 percent of all net new jobs since the 1970s. Furthermore, this trend is accelerating. The number of small businesses in the United States has increased by 49 percent since 1982. From 1990 through 2016, small business has added 8 million new jobs while big business has eliminated 4 million jobs in the same period.³ The latest census data show that small businesses (fewer than 1,000 employees) have accounted for at least 80 percent of the annual payroll and 85 percent of all paid employees from 2011 to 2015.⁴ Any report that focuses solely on the activity of large employers is not representative of the profile of U.S. employers or employees.

SURVEY METHODOLOGY

Bridging the Talent Gap seeks to address these shortcomings through survey development, administration, and follow-up activity focused on three key principles. First, the survey construction and development elevate the community to the primary interest. All ques-

tions, responses, and analyses are intended to deliver information that captures the essential makeup of the community and characterizes the relationship between business and education in that specific area.⁵ To this end, the survey comprises four environmental landscapes, each intended to highlight specific considerations:

- 1) The business community landscape provides information on the economic and demographic profile of the local business community, with emphasis on local economic outlook, anticipated growth, and business demographic information.
- 2) The hiring landscape portrays experiences of the business community in hiring new employees for specific high-demand positions. This section is helpful in assessing the challenges faced in filling key positions across a variety of factors and can provide useful insight by comparing the community's hiring challenges with other communities in the survey database.
- 3) The skills needs landscape explores the business community's general experience with skills gaps and how these gaps are measured by looking at labor pool educational attainment at three levels: high school, associate's degree, and bachelor's degree. The goal is to gain some understanding of general skills gaps in the community and the relative value added to skills mastery with additional educational attainment.
- 4) The learning landscape offers information on the potential return on investment (ROI) to be gained by investing in employees' learning, a profile of the characteristics necessary in partnerships with community learning providers, and prospects for future partnerships.

From January 2016 through May 2017, the survey was administered in 22 cities, counties, or regions across six states. A total of 1,657 surveys were fully or partially completed by a variety of organizational representatives, including human resource management, executive leadership, and small business owners.

The second principle relates to the data from these communities, which are aggregated in a bottom-up rather than a top-down process. Although typical approaches seek to capture national or international data in their administration and rely on sampling techniques to simulate

or infer regional perspectives, such practices can be misleading for local communities. This project focuses on data collection in a given community with specific expectations that the data will honestly characterize the nature of business-education partnerships and the talent development necessary for success in their endeavors. A quick comparison of the methods will serve to highlight the differences. *Manufacturing Barometer: Business Outlook Report* (PwC 2017) found that 32 percent of respondents expected to hire new employees in the coming year. Data from Bridging the Talent Gap show that more than 78 percent of employers involved in manufacturing expect to hire full-time regular employees in the near future. What is responsible for the notable difference in estimate? The *Manufacturing Barometer* report is one of a series of quarterly business outlook surveys. It was based on a sample of 60 businesses with an average of 7,985 employees (PwC 2017). In contrast, Bridging the Talent Gap data analyses were derived from 387 respondents representing manufacturing, with 87 percent of these from organizations with 1,000 or fewer employees. One interpretation of this disparity in hiring expectations suggests that small and medium businesses involved in manufacturing face a substantial challenge in finding suitable employees compared to their larger corporation counterparts. A host of potential causes could be responsible for these differences, but if the local CTD uses small-sample nationally derived information to infer conditions in the community, it can be misleading. This problem is exacerbated when the findings are highlighted in secondhand online reports derived from the original report without providing information on the underlying data. These differences underscore how differing data foundations can lead to notable differences in results.

Finally, the activities involved in building community support for survey participation, the analyses of results, and the sharing of the outcomes are all intended to provide information for an empowered community that culminates in collaborative action. Actionable evidence is made up of data that identifies critical issues that should be addressed by CTD initiatives; is mutually beneficial for working learners, employers, and learning providers; identifies key information to create paths for education-business-learner partnerships; and provides information on likely community candidates for such partnerships.

Analyses of the current database of respondents provide a voice for more than 1,600 businesses that have participated in Bridging the

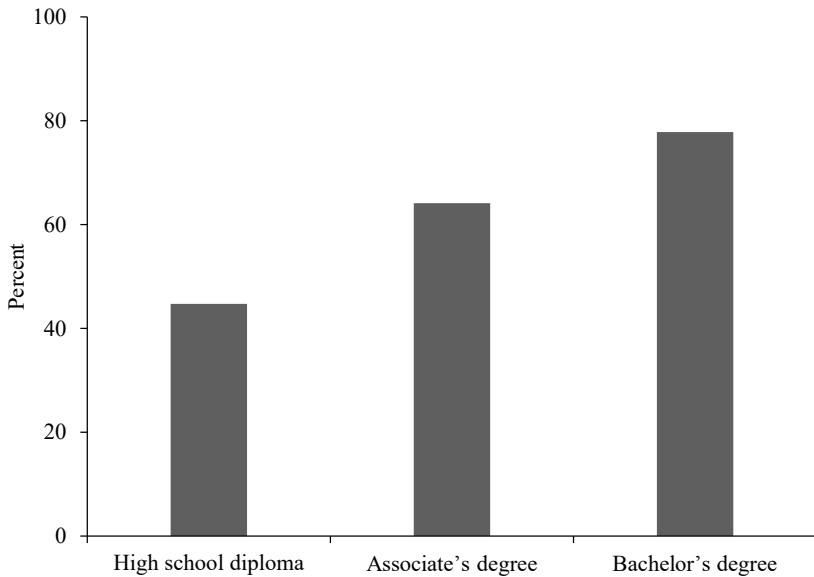
Talent Gap surveys through May 2017. Several results are noteworthy from these participants that point to issues needing immediate action, and potential remedies communities might take to promote the added value gained from a more educated workforce.

Employers Recognize That Greater Educational Attainment Results in Greater Applied Skills

A common cultural theme claims that higher education is remiss in producing graduates who have applied skills that benefit the workplace. Data from our participants run counter to such assertions. Respondents considered the skills of their labor pool according to their highest educational attainment: a high school diploma, associate's degree, or bachelor's degree. Across all applied skills considered—which included ability to work with diverse coworkers/clients, application of information technology skills, leadership, problem solving, and teamwork/collaboration skills—the percentage of the labor pool possessing these skills increased notably with each level of education attained. As Figure 3.2 shows, 45 percent of the labor pool with a high school diploma had these skills in aggregate. This percentage increased to 64 percent for those with an associate's degree and 78 percent for those with a bachelor's degree. One interpretation of these data from the perspective of the employer is that the process of learning, regardless of the subject matter, is a value-added influence. Hiring from a more educated labor pool produces a greater likelihood of gaining an employee with the applied skills needed across virtually all workplace conditions. Interestingly, this trend holds for all sizes of employers. For small employers (1–200 employees), 47 percent of the labor pool with a high school diploma, 63 percent of those with an associate's degree, and 77 percent of those with a bachelor's degree were considered to possess applied skills. For medium-sized enterprises (201–1,000 employees), these percentages were 41 percent for high school diploma holders, 65 percent for associate's degree holders, and 79 percent for bachelor's degree holders. From the perspective of the employer, more education clearly is associated with gains in workplace-valued skills regardless of organization size.

Action Opportunity: Higher education spends considerable resources and time in promoting efforts to meet employers' workforce

Figure 3.2 Percent of Labor Pool Possessing Applied Skills



SOURCE: Bridging the Talent Gap, the Talent Alignment Survey.

NOTE: All data gathered from survey administration February 2016 through May 2017. Administration locations included multiple sites in Florida, Indiana, Kentucky, New Jersey, Tennessee, and Washington.

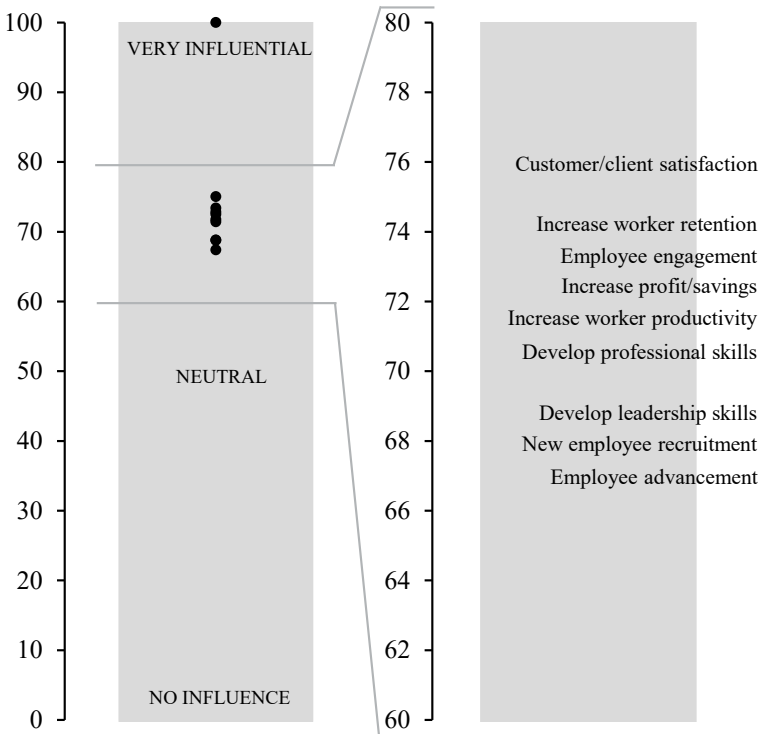
needs. Although anecdotal evidence from large corporations is a stand-in technique for demonstrating the responsiveness and efficacy of higher education's efforts, it rarely speaks to the more pragmatic needs of small and medium-sized enterprises. These data provide a direct summary of the surveyed employers' perspective, especially for businesses with 1,000 or fewer employees, and offer a basis for raising awareness that the credentials granted by colleges and universities are a deep driver for a more skilled workforce, regardless of graduates' academic focus.

Education Programs Are Influential in Helping Businesses Achieve Organizational Goals

Figure 3.3 shows the influence of education programs on the ability to achieve organizational goals from an employer's perspective.

Nine organizational goals were selected by item analysis reports by top employers to the 2016 Great Places to Work and the 2016 *Training* magazine Top 125 education employers describing the influence of education. For example, multiple organizations reported the benefits accrued in terms of decreased worker turnover based on education benefit. This was then identified as an organizational goal that was included in the survey. These goals are listed beside their respective average rating in Figure 3.3. As the results indicate, education had a profound impact on achievement for all goals, with a range of 67–75, where 1 = no influence

Figure 3.3 Influence of Education Programs on Ability to Achieve Organizational Goals (1 = no influence at all; 100 = very influential)



SOURCE: Bridging the Talent Gap, the Talent Alignment Survey.

NOTE: All data gathered from survey administration February 2016 through May 2017. Administration locations included multiple sites in Florida, Indiana, Kentucky, New Jersey, Tennessee, and Washington.

ence at all and 100 = very influential. Both the level of influence and the consistently high responses point to a reality that deserves deeper analysis and development.

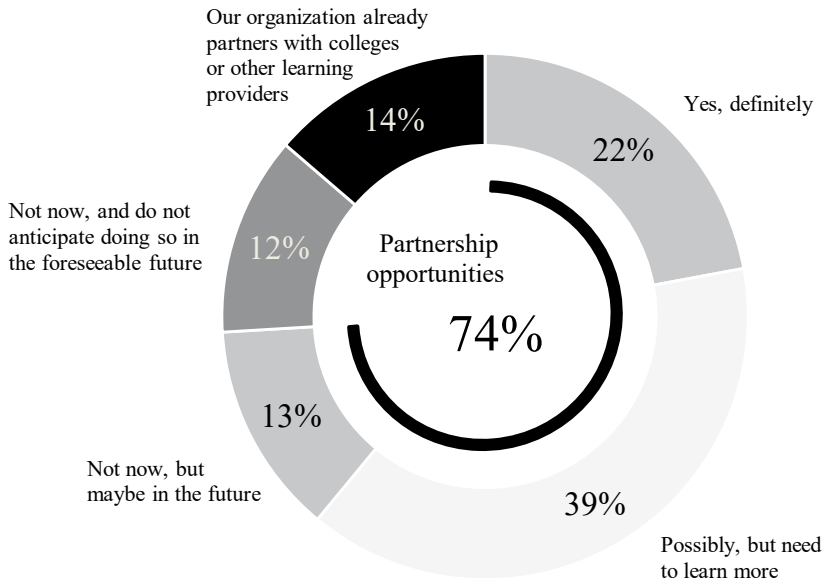
Action Opportunity: These data indicate a meaningful opportunity for higher education and businesses to collaborate in specific ways to address two strands of exploration. The first concerns more detailed inquiry into the elements of education that have both common and unique influence on organizational goals. The second entails cooperative efforts to create more closely aligned learning with organizational goals. Data obtained from this survey can serve as a baseline from which to launch such initiatives.

Employers Do Not Currently Take Advantage of the Benefits of Working with Learning Providers

When asked about their current relationship with higher education, employers reveal a level of involvement that is inconsistent with their perspective on the value of education, and partnerships are incongruent with the actual benefits of education for the workplace as described above. For example, as seen in Figure 3.4, when asked about existing or planned partnerships with local higher education institutions to support employees' learning, only 14 percent reported they already do so. Equally problematic, the majority of employers (55 percent) are not taking full advantage of the expertise and resources local colleges and universities hold to assist in assessing the talent gaps their employees face. Fortunately, a large portion of employers embrace the *notion* of working more closely with local higher education institutions. Seventy-four percent say they would either definitely or possibly consider partnering with a local institution. Only 12 percent say they have no plans to partner.

Action Opportunity: The downside of meager interaction with education is countered by the sizable potential for partnering between higher education and business. The discrepancy between the actual partnerships and the desire to do so is more indicative of lack of effort or know-how on the part of education institutions than it is a shortcoming of businesses. An ample proportion of businesses would welcome the opportunity to discover ways in which the higher education and business communities can collaborate. CTDs should take the steps of

Figure 3.4 Consideration of Partnership with Local Postsecondary Institutions or Other Learning Provider to Support Education, Learning, or Training for Your Employees



SOURCE: Bridging the Talent Gap, the Talent Alignment Survey.

NOTE: All data gathered from survey administration February 2016 through May 2017. Administration locations included multiple sites in Florida, Indiana, Kentucky, New Jersey, Tennessee, and Washington.

identifying organizations in their area who fit this partnering potential as an inaugural community initiative, followed by intereducation provider collaboration to fit their employers’ learning needs.

Employers Are Convinced That Their Employees Are Too Busy to Pursue Education

Respondents were asked why they think their employees did not take more advantage of the education programs offered. Figure 3.5 depicts employers’ perspectives on the reasons. A large majority (70 percent) claimed their employees were too busy or otherwise committed. This response is surprising, given that only 6 percent thought there

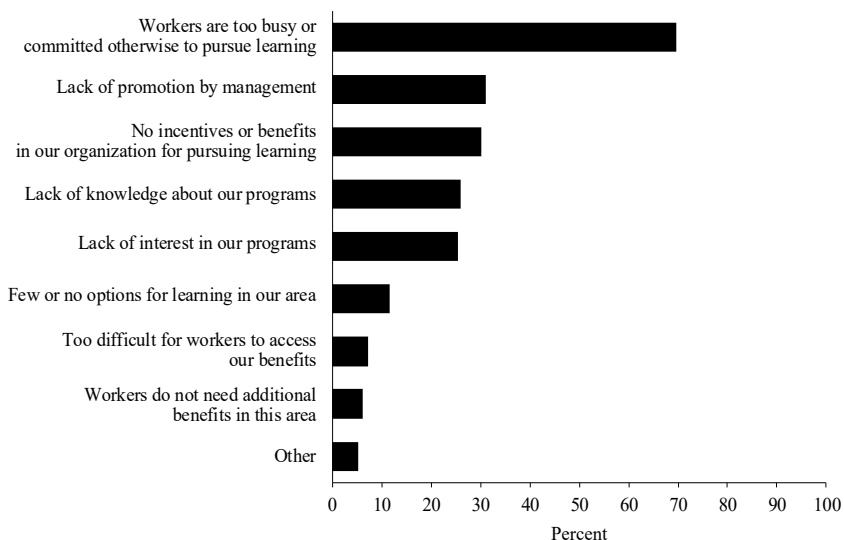
was no need for additional education. One explanation for such a divergence could be in the worker population that most often uses employers' education benefits. The majority of employers (53 percent) identify mid-level employees as most often taking advantage of their education benefits. Only 20 percent of employers reported that their entry-level employees are most likely to take advantage of education benefits. Of course, entry-level workers make less in wages and must work more if they shoulder the burdensome cost of education personally. The irony in this disparity is that the very employees who have the least time—and would benefit most from advancing their education—least participate in the activity that would most positively influence them.

Action Opportunity: Employers are missing a core opportunity in not addressing the difficulty entry-level workers face in achieving more education. As the data above reveal, more education strengthens the applied skill sets of the workforce and has the added benefit of notable contributions to helping employers achieve their organizational goals. Investment in the education of entry-level workers holds the greatest potential for the greatest good. Programs aimed at assisting entry-level workers (e.g., the UPS Metropolitan College, Verizon's Learning Link) show remarkable workplace gains in worker productivity, retention, and employee loyalty. Immediate emphasis on the advantages and benefits from employer learning support for entry-level employees is one of the more impactful areas CTD organizations can explore.

New Learning Credentials Are Emerging as Equal to or Exceeding Anticipated Future Need for More Traditional Education Milestones

The historical franchise higher education has held for decades is giving way to a new set of credentials employers are eager to embrace. As Figure 3.6 indicates, data show that the greatest need for education credentials over the next five years will be for those holding a bachelor's degree (44 percent expecting increased need over the next five years), but emergent trends in education are clear. Increased needs for industry or professional association credentials (41 percent expecting increased need) and technical college credentials (37 percent anticipating increased need) approach the same anticipated need as bachelor's degrees. Notably, the more traditional credential of an associate's degree is slightly less needed in the future than a high school diploma

Figure 3.5 Reasons Employees Do Not Take More Advantage of Employer’s Education Benefits



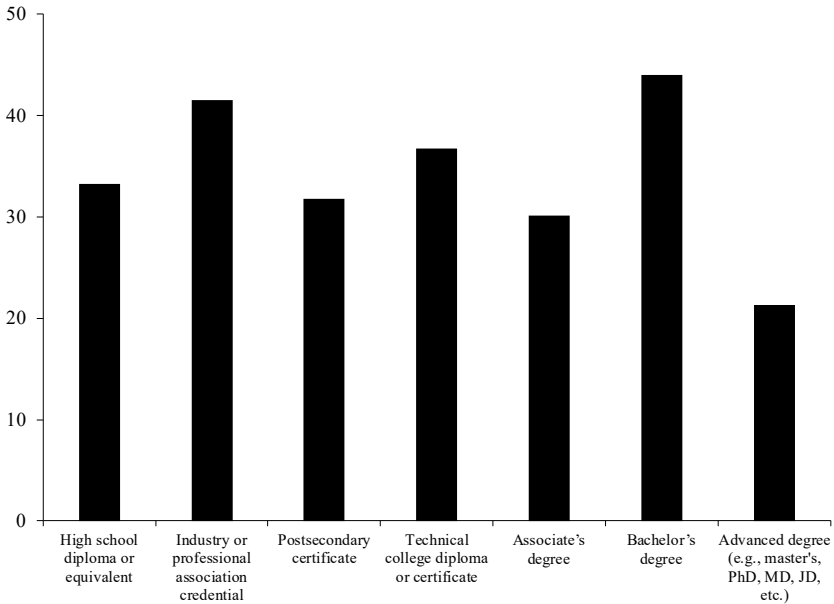
SOURCE: Bridging the Talent Gap, the Talent Alignment Survey.

NOTE: All data gathered from survey administration February 2016 through May 2017. Administration locations included multiple sites in Florida, Indiana, Kentucky, New Jersey, Tennessee, and Washington.

or its equivalent (30 percent versus 33 percent, respectively, expecting increased need). From the employer’s perspective, there is a massive shift in anticipated learning needs that marks a turning point for the education plans of future workers and learners.

Action Opportunity: Higher education and businesses have an immediate and urgent need to collaborate in this new learning arena. As witnessed with the emergent “bootcamp” concept, programs providing focused, specific, short-term, accelerated learning are meaningful portals into higher learning and higher-paying positions. Higher education institutions possess the expertise and resources that lend legitimacy and efficacy to this movement. Ironically, if higher education does not step into this area, it risks becoming less relevant in a culture that has begun to question the cost and utility of more traditional markers of learning. This is an ideal intersection of business, education, and governmental

Figure 3.6 Percent of Employers Anticipating Increased Need for Workers by Credential



SOURCE: Bridging the Talent Gap, the Talent Alignment Survey.

NOTE: All data gathered from survey administration February 2016 through May 2017. Administration locations included multiple sites in Florida, Indiana, Kentucky, New Jersey, Tennessee, and Washington.

involvement in which cooperative effort accrues to the benefit of the common good.

SUMMARY

Survey findings show that a valuable relationship exists between employers who provide learning benefits and employees who take advantage of these programs. Until now, much of the evidence to support this notion has not been generalizable due to the anecdotal nature of the success stories. Consistently lacking in the research were data from

midsized and smaller employers describing the nature of employer-provided educational benefits, the need for employer-provided educational benefits, and affirmation of the ROI for the employer. While many, primarily larger, companies have been able to measure isolated ROIs for their learning benefits programs, these specific ROIs lack meaning when applied to companies such as small and medium-sized employers, which are operating under vastly dissimilar circumstances. Until now, for companies interested in leveraging their education benefits as a strategic asset, little if any data existed to help them make objective decisions in that direction.

Communities need objective information from which to inform interested employers about how to make investments in their workforce that reinforce employers' goals, the employees' educational attainment, and regional economic prosperity. Locally focused and data-driven approaches, such as Bridging the Talent Gap, provide this objective information, which is a tested, productive framework from which to build the case for more employers to enter into partnerships with their employees and their communities. When more of these partnerships occur, more businesses have an opportunity to thrive, and ultimately more individuals have an opportunity to succeed.

Notes

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1. See <http://cityobservatory.org/talent-and-prosperity> (accessed March 14, 2018).
2. See https://www.luminafoundation.org/goal_2025 (accessed March 14, 2018).
3. See <https://www.sba.gov/managing-business/running-business/energy-efficiency/sustainable-business-practices/small-business-trends> (accessed March 14, 2018).
4. See <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk> (accessed March 14, 2018).
5. Some survey questions contained in the Bridging the Talent Gap Talent Alignment Survey are from the Society for Human Resource Management's (SHRM's) "Local Skills Shortages" survey and are used with permission from SHRM.

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