# Cultivating Skills P

to Build the Talent Pipelines of **Tomorrow** 







As the global leader in talent solutions, we take pride in what we do, connecting great people to great opportunities, helping businesses win and careers soar. Today, with \$13.4 billion in revenues and 500+ global locations, Allegis Group and its network of specialized companies provide a full suite of complementary talent solutions that solves nearly every workforce challenge to empower business success while consistently delivering an unsurpassed quality experience. Our companies include Aerotek; TEKsystems; Aston Carter; Allegis Global Solutions; Major, Lindsey & Africa; Allegis Partners; MarketSource; EASi; The Stamford Group; and Getting Hired.

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# Introduction

Critical skills are difficult to find. Demographic shifts and intense global competition force employers to compete for a supply of workers that is far outmatched by demand. The growth of artificial intelligence (AI) creates a need for talent to develop and manage the technology. The advent of hybrid skills means that employers need workers with a combination of data science, management, business strategy, and communication expertise. These are just a few examples of technology innovations and emerging talent demands adding to an already acute shortage of talent.

For employers, when it comes to developing skills to address the talent shortage, traditional sources are not enough. In a recent Allegis Group Cultivating Skills survey of 1,000 HR decision-makers, 85 percent of respondents agree that companies need to acquire skilled talent faster than higher education institutions are producing it. Eighty-one percent agree that traditional corporate learning and development programs are not keeping up with the demand for new skills. Seventy-one percent believe the current talent supply does not support the demand for new capabilities and technologies, and 75 percent agree that the struggle to acquire and retain talent with critical skills prevents employers from realizing their full growth potential.

In the past, employers addressed talent scarcity by boosting their recruiting function — relying on talent acquisition to help them build the workforce they need to stay ahead. Today, however, simply drawing from an external skills supply cannot keep up with demand, and many organizations are taking the challenge into their own hands. In fact, nearly all HR decision-makers surveyed (93 percent) believe the employer is responsible for enabling their workforce to acquire new skills, and 90 percent are exploring new ways to develop critical skills within their workforce. Addressing the challenge, most HR decision-makers (86 percent) anticipate that their budget for training programs, and learning and development will increase over the next two years.

The implications are clear: sustaining a supply of workers with needed skills is a fundamental responsibility for any employer. As companies recognize the growing need to cultivate great talent, they are shifting their focus on boosting traditional strategies used in the past to foster new capabilities in the workforce. Today, every aspect of learning and development is undergoing some level of transformation as companies apply a variety of new or advanced strategies to gain an advantage.

This report was created to help talent decision-makers gain insight on best practices and innovations influencing skills development in the workforce. Areas of focus include mentorships, apprenticeships, certifications, and academic partnerships. Along with findings from the survey of 1,000 HR decision-makers, the insights provide a perspective on trends that are reshaping traditional approaches, as well as lessons from companies that are putting effective strategies to work.

# **Mentorships** Forge Connections to Transfer Knowledge

Knowledge-sharing relationships between experienced workers and those who seek to learn from them are a useful approach to cultivating skills throughout the workforce. In a mentorship program, organizations set up formalized structures with an established learning goal, targeted participants (both mentors and mentees), and a format for interaction. The result is a development approach that accelerates the learning curve with realworld, human interaction and a practical perspective on the skills and competencies that drive success in a given role.

In an active mentorship program, everyone wins. The mentee benefits from detailed and practical learning, and the mentor benefits from the fulfillment of passing on values that can help others achieve career success. These benefits go beyond the transfer of knowledge and extend to improvements in employee satisfaction and workforce inclusiveness. According to one study, employee retention rates were more than 20 percent higher for those who participated in mentorship programs than those who did not.<sup>1</sup> Another study found mentorships were a top strategy for improving diversity and inclusion in the workplace, leading to an 18 to 24 percent increase in representation for black, Hispanic, and Asian women in management, along with a significant rise among men of traditionally underrepresented backgrounds.<sup>2</sup>

Mentorship is a well-proven and accepted approach to learning. Companies have sustained formalized programs for everything from leadership development to the advancement of technical, marketing, management, and communications skills. According to the Allegis Group survey, 42 percent of HR decision-makers claim their organizations widely use mentorships as part of their development strategy. Another 45 percent are in the early stages of adoption or plan to implement programs over the next two years.

## Recent Advances Break Down Traditional Limitations

While mentoring can boost skills development, organizations have also had to accept its several drawbacks. For example, traditional mentorships require a significant time commitment. Likewise, without careful program management, mentees may endure an unfocused learning experience with few lasting outcomes. Finally, traditional views have limited the opportunity for relationships to one direction, with the more tenured worker transferring knowledge to the more junior employee.

As companies advance their mentorship programs, various changes are taking place to address some of these challenges. For example, digital tools can automate some aspects of the process to maintain consistency and focus on outcomes. Those same processes also automate many of the more time-consuming aspects of managing a mentorship program, such as signing up participants, matching mentors to mentees, providing virtual space for one-on-one collaboration and interaction, gathering feedback, and measuring results.<sup>3</sup>

In addition to automating the process, technology platforms are helping to bring larger pools of people together through online mentorships. These venues enable employees to access mentors from inside or outside their organizations, thereby developing as many mentor relationships as needed. One notable example is Veterati. The mentorship site serves U.S. military veterans and cites anywhere from four to 25 mentors per mentee.<sup>4</sup> The on-demand aspect of digital mentorship platforms gives employees control over their learning path and allows for a tailored experience that directly matches individual needs. Beyond enabling easier connections between mentors and mentees, organizations are also addressing agerelated challenges to traditional mentoring with reverse mentorships. In this scenario, newer members of the workforce share knowledge with more established workers. The approach can be instrumental in helping tenured workers gain knowledge about new technologies, modes of communication, and other competencies newer workers bring to the organization. Reverse mentorships are particularly important as Baby Boomers reach retirement, and many companies seek to ensure those workers do not take their skills with them when they leave the organization.

Overall, Allegis Group survey respondents are positive about the use of mentorships. Approximately 90 percent of HR decision-makers state that mentorships significantly or moderately impact the employee experience, skills development, the ability to attract and retain talent, and leadership development. Among organizations with programs in place, the survey also found 43 percent of the workforce has participated either as mentors or mentees, with 29 percent of mentorships having been virtual or long-distance. Roughly two-thirds of respondents cited mentorships as a source of growth for soft skills, such as leadership (68 percent), relationship building (65 percent), and strategic thinking (62 percent). Hard skills were also critical, with 49 percent of HR decision-makers citing mentorships as a means for their organizations to cultivate technical capabilities, such as software development knowledge, in the workforce.

While mentorships are recognized for their value to employers, companies are not content with the status quo. Ninety-seven percent of organizations with a mentorship program have enhanced it in the last two years, with 64 percent dedicating more employees to program management and 52 percent broadening the scope of their programs. Further, 51 percent have applied more technologies, and 50 percent have dedicated more budget. Looking ahead, employers can expect to see the continued evolution of existing programs as more participants and technologies boost the value of mentorships to the enterprise.

# **Case in Point:** Putting Modern Mentorship to Work

For companies seeking a better way forward in transferring critical skills, mentorships are delivering impact across multiple industries.

#### Caterpillar Focuses on Skills and Opportunity

The global manufacturer of construction and mining equipment, and diesel and locomotive technology depends on a variety of critical skills to stay ahead in a competitive and innovative industry. To maximize the effectiveness and value of its global workforce and expand its supply of available talent, Caterpillar offers professional development programs centered on today's most demanding fields, including analytics, engineering, financial services, HR, IT, leadership, and marketing.<sup>5</sup> Mentorships last two to three years, with a strategy that emphasizes relationship building with senior professionals, and a combination of general soft skills and specific fields of expertise.<sup>6</sup>

#### Boeing Unlocks Skills to Boost Innovation Potential

As a leader in aerospace and provider of technical products and services to commercial and military sectors, Boeing relies on a steady supply of scarce and emerging skills to grow in a highly demanding industry.<sup>7</sup> The company's rotational program is a mentorship strategy that opens the talent supply to promising, entry-level workers. Program participants are paired with senior-level professionals in engineering, IT, business, or HR for six-month intervals, after which they switch to another mentor. Total programs last from two to four years, followed by full roles within the company.

# **Apprenticeships** Bridge the Middle-Skills Gap

Similar to mentorship programs but aimed more directly at entry-level talent, apprenticeships typically give workers a wage while they learn on the job, accompanied by related technical or classroom instruction. Programs generally last from one to four years depending on the complexity of the work, and registered apprenticeships provide a learning effort that results in an industry-recognized credential.<sup>8</sup> Advantages of apprenticeships include a reliable source of needed skills for the employer and cost-effective, real-world training. In addition, 92 percent of employers in one study believe apprenticeships lead to a more "motivated and satisfied workplace."<sup>9</sup>

The practice of learning a skill or craft by working with an established professional applies to a growing array of competencies that require more than a high school diploma yet do not fall into the realm of the four-year college degree.<sup>10</sup> These "middle-skill" occupations can range from paralegals to dental hygienists, electricians, and police officers.<sup>11</sup> One study found middle skills represent 53 percent of the total U.S. labor market while the number of workers trained in those skills only represents 43 percent of the worker population.<sup>12</sup> A similar skills challenge is affecting technical fields, with a skills gap between graduates of four-year colleges and companies looking to hire people with needed coding skills. Experts predict that the United States will have one million more coding jobs than workers to fill them by 2020.<sup>13</sup>

The Allegis Group survey finds apprenticeship programs have a substantial influence in organizations with them in place. Nearly all (96 percent) HR decision-makers in organizations with apprenticeships claim they have a significant or moderate positive impact on the overall employee experience. Additional advantages include an improved ability to address skill needs (experienced by 94 percent of respondents), the ability to attract and retain critical talent (92 percent), and an improvement in the supply of available talent (89 percent).



### Widespread in Europe, Apprenticeships Gain Ground in the United States

Apprenticeships help to meet professional skills demands when formal education falls short. In 2016, the number of U.S. apprentices had grown to 505,000, up a full 29 percent since 2011.<sup>14</sup> Despite the increase, only .02 percent of U.S. employees are apprentices. In contrast, roughly 70 percent of students participate in apprenticeships in Switzerland,<sup>15</sup> and the portion of new workers engaging in apprenticeships in Germany is about 60 percent.<sup>16</sup> So while the use of apprenticeships to expand the number of qualified workers is part of many employers' talent and growth strategies, there is room to improve. In the Allegis Group survey, 38 percent of HR decision-makers claim they are widely using apprenticeships in their organizations while another 42 percent are in the early stages of adoption or plan to implement programs over the next two years.

Apprenticeships are evolving to cover a broad range of skills and competencies. In the past, apprentices were seen as recipients of long-held knowledge in traditional areas such as construction or mining. But today, only 27 of 810 occupations listed by the U.S. Department of Labor comprise the core apprenticeship activity. Most are occupations that do not require a four-year college degree and are largely in industrial fields. The number of fields considered ideal for apprenticeships may expand in the future, particularly as companies identify areas of potential based on new skills demands and incorporate workers with some level of secondary education. For example, apprenticeships may expand to other fields requiring some level of college education, such as graphic designers and database administrators. These occupations represent the growth of apprenticeship into fields that are in high demand due to new advances in technology.<sup>17</sup>

As with mentorships, apprenticeships were regarded as a positive influence by the HR decision-makers in the Allegis Group survey. Of the respondents who had programs in place in their organizations, 97 percent have enhanced their apprenticeships over the past two years. Leading areas of improvement include dedicating more employees to manage the program (56 percent), applying more technologies (53 percent), dedicating more budget (52 percent), or broadening the program's scope (51 percent).

### **Case in Point:** Apprenticeship Model Cultivates Talent Across Industries

Examples of successful apprenticeship strategies can be found in an expanding number of fields and industries. The following highlights outline successes in technology, manufacturing, and financial services.

#### Tech Companies Tap Non-Traditional Workers

Social media company Pinterest is targeting the growing and often underutilized population of skilled coders who lack four-year degrees. Highly selective, the company's apprenticeship program accepts only a handful of participants out of hundreds of applicants. Pinterest draws candidates from what it calls "non-traditional" tech backgrounds, such as coding boot camps, self-taught coders, and those without a degree. Other notable examples of active programs include those run by Airbnb (for engineering specialists and data scientists) and LinkedIn, whose highly selective "REACH" program for cultivating technical talent chose only 30 apprentices out of nearly 700 applicants.<sup>18</sup>

#### Manufacturing Apprenticeships Develop Computer and Analytics Skills

Apprenticeships are well-suited to address the demands of today's increasingly technical manufacturing environment. Global manufacturing leader Siemens, for example, has adopted a German apprenticeship model for its U.S. operations, which emphasizes a career track that includes on-the-job training with community college partners. Welding, computer integrated machining, and engineering are examples of fields in the program.<sup>19</sup>

# Financial Services Leader Bridges the Education-Experience Divide

It is a common issue in financial services and many other sectors: entry-level roles often list experience as a requirement, yet most available talent does not yet have experience. However, financial services leader Zurich Insurance helps bridge that experience gap with a rigorous two-year apprenticeship program in claims, finance, or underwriting.<sup>20</sup> Highly structured, the company's program includes an assigned mentor, a detailed training plan, and a one-year work requirement at the company following graduation from the program — a common requirement from employers offering such programs. Zurich recruits apprentices ranging from high-school and college graduates to people looking to switch fields.

# **Employer-Paid Certifications** Give Employers a Learning Advantage

Paid training and certifications are a practical option for employers that need to keep their workers up-to-date on the latest skills in their fields. Certifications are anchored by an assessment process by which a participant proves proficiency in a certain skill. The assessment and certification typically fall under the responsibility of a standard-setting organization, established by a credible and recognized process for determining content.<sup>21</sup>

Common examples of certification range from business skills such as the Project Management Professional to technical fields such as a C++ Certified Professional Programmer<sup>22</sup> and vocational fields like construction or transportation.<sup>23</sup> In addition to certifications workers pursue on their own, employers may pay for employees to participate in certificate programs, which differ from certification in that they are based on a course, sometimes in conjunction with training by a local educational institution or industry organization. Passing a specific test defines certification.<sup>24</sup>

## **Certifications Deliver Multiple Benefits**

With emerging skills facing increasing demand and lower supplies of available talent, the case for employer-paid certifications is strong. On the positive side, the number of certifications and associated training programs is large, so if companies have employees willing to take on the learning effort, new or updated skills can be acquired reliably. Additionally, certifications can boost employee morale and help to advertise and differentiate the organization's skill set when selling services to potential customers.

According to one industry report, the portion of employers offering to pay for certifications rose from a 2016 level of 33 percent up to 47 percent in 2017.<sup>25</sup> In the Allegis Group survey, 42 percent of HR decision-makers claim they are widely using certifications to acquire



or update skills among their workers while another 42 percent are in the early stages of adoption or plan to implement programs over the next two years.

Overall, HR decision-makers from organizations using employer-paid certifications view the practice favorably. Roughly nine in 10 HR decision-makers agree that certification has a positive influence on the overall employee experience (96 percent), the development of new skills (93 percent), the organization's ability to attract and retain critical talent (91 percent), and leadership development (90 percent). Likewise, 96 percent agree that certification is valuable for helping to sell the company's skills and capabilities to clients and prospects. Meanwhile, more than half of employers utilizing employer-paid certification have enhanced them the last two years by adding new skills to their program (55 percent), increasing their budget (53 percent), or opening the program up to more people or geographies (51 percent).



### **Case in Point:** Employers Expand Certification Strategies Amid Skills Shortage

Due to their highly structured and repeatable nature, certifications can be a valuable tool for helping employers expand their supply of available skills. This benefit is particularly relevant in industries experiencing a shortage of workers in critical areas, ranging from IT to transportation as shown in the following examples.

#### Industry Leader Gives Away Training

For a major global technology leader, innovation is at the heart of success, and acquiring talent with the rare skills is difficult. Such is the case for Google. While known for its industry leadership and innovation, it must strive to secure talent with unique technology knowledge and capabilities. Toward that end, Google has taken skills development to a new level by offering, and paying for, certification to workers outside the company.

The Google IT Support Professional Certificate program costs approximately \$600, includes 64 hours of video modules, and takes eight months to complete. Notably, the company offered to pick up the full cost of the certification for 10,000 people in the United States with demonstrated financial need. Even though most graduates would take their skills to other employers, the company considers the strategy worth the returns for improving its talent supply.<sup>26</sup>

*Transportation Company Pays to License Commercial Drivers* Another example of an industry suffering from talent shortages is the transportation sector. In particular, as truck drivers in the U.S.' Baby Boomer generation retire, potential new entrants to the workforce are shying away from the long hours, so the need for drivers continues to soar due to increases in delivery demand from a growing economy. As a result, the United States is experiencing a shortfall of 60,000 drivers.<sup>27</sup>

To address the talent shortage, trucking companies are offering a variety of incentives, including paid training for a Commercial Driver's License (CDL). For example, major U.S. carrier Roehl Transport provides paid training to potential employees, beginning with the CDL and leading to additional opportunities on the job.<sup>28</sup> Similar to certification, a license in a field validates certain skills based on a test or assessment. Unlike a certification, however, a license is a legal requirement to practice in a field, so paying for the associated training can provide an organization with powerful incentive to attract new workers.

# Academic Partnerships Accelerate the Acquisition of New Capabilities

When it comes to producing talent with many of today's top technical skills, higher education alone cannot keep up with demand, nor does it have the agility to deliver talent that meets rapidly evolving skills needs quickly. What many two-, four- and six-year institutions lack in speed, however, they make up for in their ability to deliver solid foundations of knowledge, credibility, and the opportunity for students to learn and adapt swiftly to market-driven learning resources.

Seeing the chance to unlock the skills-producing potential of academia, many employers are teaming up with educators to address the issue. Specifically, companies are partnering with institutions to develop learning programs tailored to particular talent needs. Examples vary widely. A large IT company may partner with a university to fund an online master's program, as AT&T and Accenture have done with Georgia Tech. Academic partnerships may also be smaller in scale, such as South Dakota's Lake Area Technical Institute, which partners with dozens of area organizations to offer two-year programs in 30 different fields, many of which are customized to a business' needs. In that program, 74 percent of students achieve success by graduating or transferring to a fouryear college within three years, a significant advantage over the 39 percent national average community college success rate.29

## Institutions and Employers Can Develop a Lasting Pipeline of Quality Talent

Overall, the learning partnership may consist of the business providing funding or resources while the institution provides access to students. Alternatively, it may include the business guiding the curriculum development and collaborating in its online delivery. For driving talent quality, the time and expense of academic partnership can be an advantage to an employer that needs to cultivate a continuing supply of emerging skills.

Usage of academic/business collaboration is strong. In the Allegis Group survey, 33 percent of HR decisionmakers say their organizations widely use some form of partnership with academic institutions. Another 46 percent are in the early stages of adoption or plan to implement programs over the next two years.

Of those organizations with partnerships in place, 93 percent claim that, compared to a reliance on four-year degrees, these partnerships accelerated the speed at which new training can be developed, delivered, and leveraged for new skills. Ninety-six percent say those partnerships improved the relevance of new skills brought into the workforce. Further, HR decisionmakers report that such partnerships have a significant or moderate impact on the overall employee experience (95 percent), the ability to attract and retain critical talent (93 percent), the ability to address skill needs (92 percent), and leadership development (91 percent).

Academic-business cooperation continues to grow. Over the past two years, 97 percent of organizations with partnerships in place enhanced their programs. Fifty-seven percent say their organizations dedicated more budget to the practice while 51 percent opened their programs to more people or expanded geographies, and 50 percent added new industry or technology partners into their programs.

### **Case in Point:** Academic Partnerships Yield Critical Skills for Employers

The following are examples of collaboration between companies and traditional institutions, as well as online education providers.

# Communications Provider Collaborates for Online Education Offering

As a communications leader, AT&T requires a continuous supply of talent with technical and people skills to manage a large customer base. To address the shortage of workers in critical positions, the company worked with technology learning institution Georgia Tech, along with online learning provider Udacity, Inc., to create an online master's degree in computer science. This program, with its longer-term education and training commitment, is one of the firsts of its kind to be delivered through an online platform.<sup>30</sup>

#### Major Tech Companies Aim to Fast-Track IT Skills

Microsoft, Red Hat Linux, and other technology leaders have partnered with Harvard and the Massachusetts Institute of Technology in a collaboration called edX. The program teaches many skills in high demand across industries.<sup>31</sup> Founded in 2012, edX now has more than 100 institutional partners around the world, with IBM and Amazon Web Services also among its many member organizations that contribute to its online learning programs.<sup>32</sup>

# **Boosting Skills** in EMEA and APAC: Challenges and Opportunities

The supply of talent with in-demand skills varies greatly across regions and countries. Demographics, culture, education systems, regulatory policies, and prevailing markets all influence how companies cultivate talent in their locations. Below is a sampling of skills and workforce development challenges being addressed around the world.

## **United Kingdom**

When it comes to the total investment in employee education in Europe, the United Kingdom (UK) ranks 22nd while Belgium, France, and The Netherlands lead the way.<sup>33</sup> A 2018 Salesforce study found that workers in the UK desire a development focus that looks beyond traditional university degrees to include all learning types. Sixty-three percent believe the development of technology skills would have a positive impact on their company's overall efficiency, and 37 percent think they will be locked out of future jobs without further technical education.<sup>34</sup> The takeaway: digital skills are top of mind in the region, and companies need to provide development opportunities if they are going to retain their best workers.

### Germany

A mixed picture of historic workforce success and future challenges is influencing the German workforce today. Contributing to Germany's strong workforce are apprenticeship-focused approaches to learning. One example is dual vocational training that lets students choose from more than 350 areas of study and participate in a two- to three-year program. Instructional training at a vocational school combines with on-the-job learning at a company to provide a complete experience.<sup>35</sup>

At the same time, McKinsey predicts that Germany will experience a gap of 700,000 workers for future technical skills and 2.4 million workers for cross-disciplinary fields by 2024. Examples of government-led activities to address the issue include identifying occupations being impacted by digitization and enabling partnerships between businesses and federal and state governments to implement new training programs and provide training facilities. In addition, programs are in place to introduce advanced digital classrooms for IT training in schools. A broad approach to preparing for a digital work environment of the future will help Germany rise to the challenge of the looming skills gap.<sup>36</sup>

### France

Since the 1970s, companies in France have been legally obligated to provide training to employees. Today, workers are entitled to training based on their tenure with the employer. This training can range up to 150 hours per year. Training must lead to an established professional qualification across more than 40,000 certification programs.<sup>37</sup>

We see upskilling as a priority among companies we work with in EMEA, particularly as they adapt to a new world of technology and automation. Developing talent is not only good for addressing skills demands; it also **boosts retention and is good for the employer brand**.

> Tobi Collett, Head of HR, EMEA Allegis Global Solutions



## Eastern Europe

According to the World Economic Forum, Eastern Europe is experiencing challenges across nearly all industries due to a shortage of available talent. Automotive, travel and tourism, energy, financial services, healthcare, oil and gas, and professional services all require a focus on talent development to remain competitive. The Forum's 2018 survey found 31 percent of the workforce needs between one and 12 months of reskilling to become current in their fields, and another nine percent need more than a year to upgrade their capabilities. Seventy-two percent of employers surveyed expect to retrain their employees in the future.<sup>38</sup>

## India

The 2018 Allegis Group Global Workforce Trends report highlighted the skills gap in India and the growing focus on education to help address that gap: "To address the need for new skills,<sup>39</sup> India's government has launched some programs to promote education, including the Skill India initiative, which aims to train 400 million people by 2022. Since its inception in 2015, Skill India has trained more than 11.7 million people.<sup>40</sup> In India, companies are likely to take a growing role in the training and upskilling of their own workforces, but they will be challenged to keep those workers from emigrating elsewhere for better opportunities.<sup>41</sup>

## China

In China, the economy is moving away from its emphasis on manufacturing for global export and shifting to a more technology, innovation, and services focus that will require a new level of skill among its workers. An IBM study found that 80 percent of Chinese executives say technological advances are reshaping demand for skills.<sup>42</sup> The Chinese government recognizes this need and has pushed for subsidized training and the development of private vocational schools.<sup>43</sup> Today, the country has several strategies in place to upskill its workforce, including corporate, private partnerships, on-the-job training programs, and a Smart Learning Institute devoted to developing education technology to improve the quality of education and expand the capacity for research.<sup>44</sup>

## Australia

A 2018 PricewaterhouseCoopers survey found that 75 percent of Australian CEOs are concerned about the availability of skills needed for their businesses, and 54 percent believe they are responsible for retraining employees whose tasks and jobs were automated by technology advances. The same study recognizes an emphasis on boosting both human skills (e.g., learning, communication, and management) and digital skills associated with emerging technologies.<sup>45</sup> The country is committed to such skills development, with a Vocational Education and Training sector that includes 3.8 million students, compared to 1.3 million in traditional higher institutions. A push for hard and soft skills will be needed to support growth in areas such as mining, healthcare, and professional services sectors.<sup>46</sup>

# A Common Challenge Across All Regions

The conditions driving talent scarcity across regions may vary by industry and country, but the need for skills is accelerating nearly everywhere. Automation is global, and so is the need for workers to adjust to the changes it brings. Businesses and governments are partnering to address skills demands with varying levels of commitment, but those that equip the workforce for continuous learning will likely enjoy a competitive advantage in the global economy of the future. While economies across the APAC region are extremely diverse, nearly every country in the region shares one challenge: **the need to upskill the workforce** 

> **rapidly**. We see companies taking development into their own hands and believe that focused learning programs and hands-on training, supported by innovative technologies, will be essential for sustaining continuous skills development needed for the future.

#### Carter Yang

Regional Managing Director, China Allegis Group

# Make **Skills Development** a Part of Talent Acquisition

Looking ahead, companies will increasingly find themselves facing a future in which hiring fully qualified new talent will not be enough to keep up with the demand for new skills. Whether the organization hires new talent and upskills to meet new skills demands or focuses on educating current employees, formulating great learning strategies will be essential.

In an effective strategy, no single learning approach will apply to all talent. Classroom training, mentorships, apprenticeships, academic partnerships, certifications, and even innovative uses of technology and automation will all play a role in successful skills acquisition. Prioritizing learning approaches that deliver the most impact is no easy task, but an expert partner with talent strategy experience can help employers build the skills pipeline they need to grow and succeed. By getting strategic about skills development, the organization can shape a program that benefits employees, talent acquisition, and the business as a whole.





**Perspectives** – Allegis Group Experts Share Insights on Addressing the Demand for New Skills

#### Setting Up Workers to Acquire, Retain, and Evolve New Skills

#### **Stephanie Elliott**

Director of Professional Development, Aerotek

In an industry that spans all facets of staffing and talent solutions, the skills of our recruiters mean everything. They impact the candidate experience, the effectiveness of workers we place, our ability to grow our networks, and the value we deliver to our clients. The capabilities our people bring to the job aren't accidental. Instead, they're the result of a skills development approach that has evolved over 35-plus years in business.

Our development approach is always evolving, but the experience driving that evolution reveals basic ideas that can help any organization ensure skills are not only learned, but that they are retained and refined over time. In short, we need to cultivate skills, and we need to make them stick. The keys to success are an understanding of the who, why, and how to train for lasting skills development.

#### Align Learning to Who You are Training

The capabilities our people bring to their work is not learned easily. Students need to be flexible. They must be open to new and different ways of working with an ability to build relationships of trust with candidates, clients, and colleagues. To fit these demands, we hire for integrity and train for skills. For other organizations and different kinds of roles, there may be several indicators for potential. In some situations, technical background may be important while others may require a history of learning new things or teaching them. In any case, when employers align education efforts to best benefit those they are training, the result is a workforce most likely to retain and develop the skills being taught.

#### Consider the Why Behind Skills Development

The "why" behind skills development is often different than many organizations realize. The real reason for training is not to teach a skill. Instead, we view training as a means to help students learn a skill. When we think of adult learning, we look at it as a delicate balance of teaching and facilitating. Training program attendees, particularly those with some experience, may not want to be told how to do their jobs. Facilitate two-way conversations whenever possible, and the result will be people who want to be engaged with the material being taught.

#### Be Intentional About How Training is Delivered

For many roles, simply teaching a class is not enough. When training for complex capabilities, an organization may consider a broader approach centered around several key concepts: "Learn, Shadow, Do, and Teach." The student learns a particular tactic or idea in a classroom, then moves to a live area where an experienced professional demonstrates that learning in a live scenario. Next, the student puts that learning into practice herself. Finally, she is asked to "teach" what she learned back to the instructor. Together, these elements create students who are confident in the new skills they acquire.

#### Equipping People to Learn

People are infinitely varied, and the types of skills we need to succeed will always evolve. For workers in nearly every industry, the demand for both soft and hard skills is growing. By focusing on helping workers embrace new capabilities, instead of remembering facts, the organization can ensure that skills are brought into the organization while employees become learning-driven and take ownership of development as part of their careers. Teaching people to learn is more important than ever, as acquiring, retaining, and evolving skills will make the difference for successful employers and workers of the future.

## Training as a Path to In-Demand Talent

Leslie Deutsch Practice Director, Learning Solutions, TEKsystems

As global providers of technology and talent services, we frequently work with clients who ask about training as a path to addressing difficult talent needs.

Companies may understandably start the conversation with a one-sizefits-all view of skills development. They need a skill, and they need to find training that delivers. With that view, it's tempting to piece together off-theshelf programs or modules that are templated to provide a certification or other similar outcome.

Unfortunately, simply buying training is only part of the equation, and organizations may find that their efforts yield too many dropouts and not enough graduates, too little quality in the resulting graduates, or issues with costs and timelines. To achieve a stronger impact, talent leaders who want to build a training strategy should commit to three areas of focus: businessdriven planning, candidate selection, and practical and compelling content.

#### Planning: Balance Goals Before Setting Up a Program

Effective training is about understanding business outcomes and aligning training priorities with those outcomes. As an employer, take the time to understand in detail where your organization is today and where you need to be in the future. For example, your business may be expanding a product or technology function, so you know you will need to bring in 100 developers over the next three years in a location where the supply is depleted and where certain skills will benefit the pending expansion.

If you want to expand that supply and train lower-skilled workers to meet your need, ask yourself, "How junior are we willing to go in bringing in trainees? How much time and resources are we willing to commit to bringing them up to speed?" There may also be other considerations. Is training aimed only at developing a skill, or is improving diversity and inclusion also a factor? A partner who knows what questions to ask can make the difference in setting a strategy that works.



Selection: Get Smart About People and Potential Selecting talent for training is not always the same as evaluating talent for immediate placement. When looking for candidates to train, the organization needs to think in terms of candidate potential, so it can cast a wide net. The person with the potential to learn a programming language, for example, can be someone who has related programming experience. Alternatively, the person for a marketing or HR position may have unrelated experience but transferrable skills that would apply to the role.

Aptitude and attitude are subjective qualities, but there are assessment tools that can help with screening. On the other hand, knowing how to identify potential talent combined with screening for the intangibles can help narrow down the pool and increase training success.

#### Content: Set up Learning for Real-World Impact

Our approach to training TEKsystems' recruiters includes key areas of focus that can apply to any effective learning program: education, exposure, and experience. Education is the actual delivery of new information, whether through a formal instructor-led setting, virtual training, or any combination of those resources. The second part is exposure to the activity, whether seeing the learnings put into practice through a lab or shadowing a senior person in the role, or looking beyond the company walls toward industry best practices. Finally, there is the experiential component, where the trainee works with a more tenured person in a live setting, practicing their skills in the presence of a mentor.

A comprehensive and blended approach picks up on the gaps that can trip up many learning programs. For example, learning cannot be put into practice without hands-on exposure, and great content is forgotten without reinforcement. Focus on the complete picture, and the outcome will be consistent and contextual, with quality results in terms of performance and impact.

#### Putting Together a Complete Program

Our clients look to a solutions partner for the guidance to understand the potential pitfalls that can compromise a training program. Often, they turn to us after trying pieces of the learning puzzle on their own and realizing limited success. With someone else covering the planning, candidate selection, and program content, organizations not only benefit from a training program that improves near-term results, but they have a system that promotes continuous improvement. It's a result that can give an employer a much-needed boost in building the skills that will move the business forward.



# Upskilling Can Reshape the Future Workforce Supply

Kim Sneeder Managing Director, CareerCircle

When a candidate applies for a job, that person is bringing their past — the knowledge they've gained, their experiences, and their accomplishments — to the application process and interview. And in the traditional hiring process, employers have one decision to make when assessing such details: Does the candidate's past bring attributes that match the employer's present needs? If the answer is yes, they hire the person. If the answer is no, the employer moves on. Today, there is a third answer, employer-facilitated learning, that can help shape the future for the candidate and boost hiring options for the employer.

Beyond Yes or No: A Third Option for Candidates and Employers We're putting that learning option to work through our CareerCircle initiative. The program was developed to provide professionals with a wealth of resources through an online platform that caters to the job seekers our clients seek. As a result, candidates "upskill" their credentials, making themselves more desirable to potential employers while also enabling career growth.

We partner with experts in education technology to deliver unique learning experiences that can be instructor-led or self-paced, supplemented with the necessary support for optimal results. By completing the coursework provided by these groups, candidates can be marketed to recruiters and potential employers with an emphasis on acquired skills and performance, versus limited work history or listed resume experience.

Today, the CareerCircle ecosystem centers around technical expertise that is in high demand. Areas of learning include data science, cybersecurity, and full stack development. These fields will continue to evolve as we add resources and as the technologies themselves change. The result gives professionals a way to keep up with changing skills demands as they arise.

#### **Everyone Wins**

Investing in skills development for candidates is not only a good idea for employers; the practice is quickly becoming a necessity for employers seeking high-demand skills. CareerCircle candidates help build the supply of workers needed to support our clients. The worker has a chance to advance her career, the employer has a better chance of securing the right talent for the job, and our organization improves the value it provides to clients and candidates alike. HTM

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# Artificial Intelligence Automates Skilled Tasks

Bruce Morton Head of Strategy, Allegis Global Solutions

Today, artificial intelligence (AI) is easing some of the pressure to hire new workers by automating many skilled tasks. But rather than take on all aspects of a role and replace the worker, as many machines did in the past, companies often apply AI to automate only parts of a job, which we refer to as augmentation. For example, AI applications can handle high-volume tasks such as research, extracting data from large repositories, turning unstructured data into structured data for analysis, or managing documents and files. This use of technology reduces the burden on human workers who would otherwise need to spend time on those tasks and frees them up to add more strategic value to their internal and external customers.

According to the Allegis Group survey, 61 percent of organizations have widely adopted or are in a pilot to use automation as a way to address skills demands, with another 15 percent planning to adopt automation strategies within the next two years. Overall, 93 percent agree that automation alleviated demand for certain skills, and among organizations using Al, 90 percent agree that Al-driven automation has become a "must-have" priority for long-term success.

#### Taming Difficult Processes

From paralegals to medical administrators, a growing number of roles can benefit from AI. For example, health information management company Coix Health is using AI to gain control of unstructured data and organize it digitally. Consider the millions of doctors' handwritten or typed entries, each of which is sprinkled with vital patient history data. An organized digital base of records can enable quick, easy access to a patient's background, prescriptions, and other records, leading to faster, more informed medical decisions that can impact patients' health and lives.<sup>47</sup>

#### Empowering the Workforce

Al-driven automation is being applied in all major industries, helping companies streamline processes and focus the efforts of its human workers on high-value activities. As the presence of Alenabled technologies grows, employers can expect automation to play an important role in addressing the need for new capabilities across the workforce while helping workers to deliver more value than ever before.

# Endnotes

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- <sup>1</sup> Kantor, Julie. "Four Steps to Build (or Boost) a Successful Mentoring Initiative at Your Company." Twomentor. 19 Nov. 2018. youtube.com.
- <sup>2</sup> Dobbin, Frank and Alexandra Kalev. "Why Diversity Programs Fail." Harvard Business Review. Jul.-Aug. 2016. hbr.org.
- <sup>3</sup> Mentorloop. mentorloop.com/features.
- <sup>4</sup> Veterati. veterati.com.
- <sup>5</sup> Caterpillar.caterpillar.com/en/careers/ career-areas/college/professionaldevelopment-programs.html.
- <sup>6</sup> Moore, Emily. "7 Companies With Impressive Mentorship Programs," Glassdoor. 30 Nov. 2018. glassdoor.com.
- <sup>7</sup> Boeing. jobs.boeing.com/entry-level.
- <sup>8</sup> U.S. Department of Labor. apprenticeship.gov/faqs.
- <sup>9</sup> "Apprenticeships the key to attracting and retaining young talent in the manufacturing industry," Thomas International. 21 Mar. 2017. thomasinternational.net.
- <sup>10</sup> "Middle-Skill Workers Are in Demand," Federal Reserve Bank of St. Louis. 22 Jan. 2018. stlouisfed.org.
- " "Opportunities Abound In Middle-Skill Jobs," Career Vision. careervision.org.
- <sup>12</sup> "United States' Forgotten Middle," National Skills Coalition. 2017. nationalskillscoalition.org.
- <sup>13</sup> Dishman, Lydia. "These Top Tech Companies are Hiring First, Training Later," Fast Company. 19 Oct. 2017. fastcompany.com.
- <sup>14</sup> "Why Aren't There More Apprentices in America?," The James G. Martin Center for Academic Renewal. 12 Jan. 2018. jamesgmartin.center.
- <sup>15</sup> Andrews, Rob. "Why Your Company Should Consider an Employee Apprenticeship Program," Inc. 8 Dec. 2016. inc.com.
- <sup>16</sup> Jacoby, Tamar. "Why Germany Is So Much Better at Training Its Workers," The Atlantic. 16 Oct. 2014. theatlantic.com.
- <sup>17</sup> Fuller, Joseph B. and Matthew Sigelman. "Room to Grow: Identifying New Frontiers for Apprenticeships," Burning Glass Technologies and Harvard Business School's Managing the Future of Work Project. 19 Dec. 2017. burning-glass.com.

- <sup>18</sup> Dishman, Lydia.
- <sup>9</sup> Shen, Lucinda. "Siemens has a German Fix for America's Skills Gap," Fortune. 24 Sep. 2018. fortune.com.
- <sup>20</sup> Preston, Caroline. "Are apprenticeships the new on-ramp to middle-class jobs?," NBC News and The Hechinger Report. 16 Apr. 2018. nbcnews.com.
- <sup>21</sup> "Professional Certification vs. Certificate Program," American Speech-Language-Hearing Association." 20 Mar. 2013. asha.org.
- <sup>22</sup> Tittel, Ed and Mary Kyle. "Best 5 Programming Certifications for IT Pros 2019," Business Daily News. 28 Jan. 2019. businessnewsdaily.com.
- <sup>23</sup> "What Are The Best Commercial Truck Driver Certifications to Have?," Advanced Technology Institute. 22 Oct. 2015. auto.edu.
- <sup>24</sup> "How Employers Use Certifications," Manufacturing Institute. themanufacturinginstitute.org.
- <sup>25</sup> "2017 Open Source Jobs Report: Employers Prioritize Hiring Open Source Professionals with Latest Skills," The Linux Foundation and Dice. Aug. 2017. linuxfoundation.org.
- <sup>26</sup> Coren, Michael J. "Google's latest hiring tactic is training other companies' employees," Quartz at Work. 16 Jan. 2018. qz.com.
- <sup>27</sup> Morris, Frank. "Facing A Critical Shortage Of Drivers, The Trucking Industry Is Changing," National Public Radio. 11 Feb. 2019. npr.org.
- <sup>28</sup> Roehl Transport. roehl.jobs/driving-jobs/ cdl-truck-driving-schools.
- <sup>29</sup> Runnion, Timm and Ivana Gibson. "Companies Can Address Talent Shortages by Partnering with Educators," Harvard Business Review. 4 Jun. 2018. hbr.org.
- <sup>30</sup> "Learn Computer Science from Georgia Tech," Udacity. udacity.com/georgia-tech.
- <sup>31</sup> Marcus, Jon. "Impatient With Colleges, Employers Design Their Own Courses," Wired. 18 Dec. 2017. wired.com.
- <sup>32</sup> EdX. edx.org/schools-partners# charter-members.
- <sup>33</sup> Durand, Stephanie. "Corporate Training and Upskilling Trends in Europe," Coursera.
  30 Aug. 2017. blog.coursera.org.

- <sup>34</sup> Salesforce UK. "Training for the Jobs of the Future: A UK Perspective," Salesforce. 17 May 2018. salesforce.com.
- <sup>35</sup> "Dual vocational training system," German Federal Government.make-it-in-germany. com/en.
- <sup>36</sup> Enders, Tobias, Viktor Hediger, Solveigh Hieronimus, Julian Kirchherr, Julia Klier, and Jorg Schubert, and Mathias Winde. "Future skills: Six approaches to close the skills gap," World Government Summit 2019 and McKinsey & Company. Jan. 2019. mckinsey.com.
- <sup>37</sup> "France: Employers obligation to provide skill development plans or training," Eurofound. 23 Aug. 2018. eurofound. europa.eu.
- <sup>38</sup> "The Future of Jobs Report," World Economic Forum. 17 Sep. 2018. weforum.org.
- <sup>39</sup> Pant, Anil. "Biggest Challenge to India's Growth: Low Skill Levels." Hindustan Times. 11 Jul. 2017. hindustantimes.com.
- <sup>40</sup> Ramesh, PR. "India's Corporations Must Help Its Growing Workforce Meet the Future," World Economic Forum. 4 Oct. 2017. weforum.org.
- <sup>41</sup> "Global Workforce Trends Report." Allegis Group. 20 Sep. 2018. allegisgroup.com.
- <sup>42</sup> Marshall, Anthony, Lucy Qu, Po Yang, and Dave Zaharchuk. "Reskilling China: Three steps to navigate the global skills storm." IBM Institute for Business Value. Feb. 2018. ibm.com.
- <sup>43</sup> Xinhua. "China promotes lifelong training to improve quality of workers," China Daily. 18 Apr. 2018. chinadaily.com.cn.
- <sup>44</sup> Marshall, Anthony.
- <sup>45</sup> "21st Global CEO Survey," PwC Australia. 2018. pwc.com.au.
- <sup>46</sup> Reeson, Andrew, Claire Mason, Todd Sanderson, Alexandra Bratanova, and Stefan Hajkowicz. "The Vet Era: Equipping Australia's workforce for the future digital economy," Commonwealth Scientific and Industrial Research Organization for TAFE Queensland. Jun. 2016. publications.csiro.au.
- <sup>47</sup> "How is Artificial Intelligence Solving Healthcare Challenges?," WIRED Brand Lab and Western Digital. 28 Aug. 2018. datamakespossible.westerndigital.com.



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