

Where Does Skilled Labor Come From?

Of the organizations that hire skilled labor, more than 83 percent said it's difficult to find skilled workers at either a regional or enterprise level. **BY STACEY HARRIS**

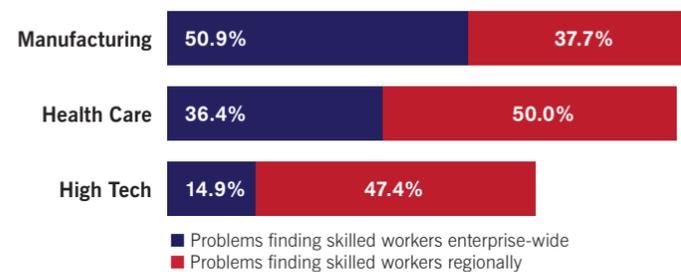
As we discussed in the March/April 2013 edition, Brandon Hall Group has partnered with the Society of Manufacturing Engineers (SME) and *Training* magazine to better understand how today's organizations are individually addressing the skills gap. The research goal was to understand the solutions that are working today—particularly how organizations are hiring and developing their skilled workforce.

Preliminary results, with more than 800 organizations participating in the survey, looked at skills gap issues in three of the hardest-hit industries: high tech, health care, and manufacturing. More than 82 percent of the organizations surveyed hired some form of skilled labor workforce. These are employees who are identified as having a specific set of technical or practical skills that are obtained through a mixture of technical or practical education, as well as hands-on practice.

Of the organizations that hire skilled labor, more than 83 percent said it's difficult to find skilled workers at either a regional or enterprise level. Manufacturers reported the most difficulty, with more than 88 percent struggling to find skilled workers.

In the March/April issue, we shared insights into the challenges

Difficulty Finding Skilled Workers



faced by both employees and companies in addressing the growing skills gap. Many organizations reported that key factors in hiring and retaining skilled workers included concerns over pay ranges, lack of leadership capabilities, and lack of interested candidates located in appropriate regions. Particularly in the high-tech and health-care sectors, more than 40 percent of organizations felt pay ranges had an effect on hiring and retention. But in all three industries, organizations stated overwhelmingly that a lack of qualified candidates was the biggest reason for not filling current open positions.

The first question many would ask is, “Are the job qualifications clearly defined?” More than 60 percent of organizations applied competencies at some level in their job descriptions for their skilled workforce. Health care was the most detail oriented, with more than 30 percent of organizations creating complete hiring profiles that include written job roles, competencies (skills plus behaviors), experience, education, cognitive (reasoning and thinking) abilities, motivation factors, and cultural fit factors. About half as many manufacturers and high-tech companies defined roles in that much detail.

The second question is, “Where are the successful employees currently coming from?” This is where the three industries differ dramatically.

HEALTH CARE

As a highly regulated industry facing dramatic changes due to the implementation of the Affordable Care Act (ACA), more than 90 percent of the health-care organizations said they prefer to hire either four-year degreed employees or a mixture of degreed and certified employees. This emphasizes the shift that has been taking place across the health-care industry to increase hiring mandates to Bachelor's and graduate degrees. In 2011, the Institute of Medicine released *The Future of Nursing* report that called for more than 80 percent of the nurses in the workforce to have achieved Bachelor's degrees by 2020 to respond to the complex and changing health-care issues of the aging global population.

Our research found that more than 75 percent of health-care organizations felt it was very difficult to fill registered nurse positions, and 50 percent felt it was difficult to fill clinical nurse positions. The next most difficult-to-fill positions were physical and occupational technicians and aides at 47 percent.

The lack of qualified health-care candidates has led to an increase in both online and local course offerings that help existing health-care professionals or students quickly increase their education and skill levels. The American Association of Colleges and Nursing reported that accelerated nursing programs usually run from 12 to 18 months and have increased to more than 230 programs offered by various universities across the U.S. Also, more than 400 baccalaureate nursing programs are offered at least partially online today.

This increased focus on higher education for skilled labor roles has led to strong relationships with four-year universities and

two-year technical colleges. Almost 41 percent of health-care organizations had a strong relationship with four-year universities, and 36.4 percent had a strong relationship with two-year technical colleges. In comparison, there was little or no relationship with local state employment agencies or high school vocational programs. It is also important to mention that for the individual workforce members, hundreds of associations provide continuing education and certification programs that are seen as critical additions to university education in the health-care industry.

HIGH TECH

More than 90 percent of the high-tech organizations, ranging from software developers to technical engineers and designers, also prefer to hire either four-year degreed employees or a mixture of degreed and certified employees. A little more than 7 percent of the organizations prefer to hire non-degreed or graduates of certified technical programs.

In the high-tech space, we saw a wider distribution of organizations that found some of their key roles difficult to fill. But the most difficult positions seemed to fall into three categories: developers, programmers, and security analysts. Just about 20 percent of high-tech organizations felt it was very difficult to hire these roles on an ongoing basis. High-tech processes such as concept planning and design and development work were simply difficult to hire into, particularly with technical skills such as:

- Product design and intellectual property management
- User and system process design
- Cloud-based infrastructure, database development, and programming skills
- Data and big data analysis skills

High-tech organizations are less likely to have a strong relationship with any educational or government body to acquire skilled workers. Only 26 percent of organizations have a strong relationship with four-year universities, and almost 50 percent have no relationship at all with high school programs, two-year colleges, or local state employment programs. This lack of community involvement creates a widening gulf for students and potential candidates looking to acquire marketable skills.

The rapid shift in the technology space to cloud and mobile solutions has left a major gap in the ability of many high-tech organizations to plan or execute as quickly as the market is demanding. More than 56 percent of high-tech organizations felt their biggest performance issue with a lack of skilled workers was productivity, while 35 percent cited missed growth opportunities.

MANUFACTURING

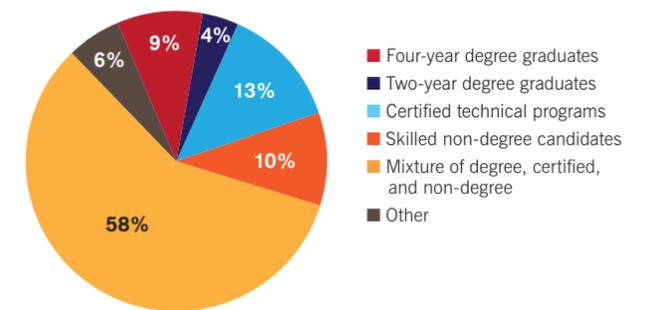
Manufacturers are finding more success in acquiring candidates from multiple preferred sources. For instance, more than 58 percent of organizations were willing to hire a mixture of degreed, certified, and non-degreed candidates.

Manufacturing organizations also were more likely to take advantage of multiple relationships with educational and government entities. In fact, more than 40 percent had some form of a relationship with high school vocational programs, two-year technical colleges, or local employment services to acquire skilled labor. Yet, it is in the manufacturing industry where we

see the greatest focus on attempting to develop skilled workforces internally, as companies believe the education systems simply have not been able to meet their hiring needs. We also see increasing efforts from manufacturing-focused associations, government agencies, and nonprofit organizations to retool their programs and conduct outreach efforts to change the perception of manufacturing careers to help companies meet their growing need for skilled labor.

Not surprisingly, many manufacturers find their biggest hiring challenge is for skilled labor roles that require greater computer-based skills. More than 47 percent of organizations stated the CNC machinist—a role that leverages computer automation tools to produce precision parts or instruments—was one of their top two most difficult positions to fill; 33 percent

Preferred Hiring Approach (Manufacturing)



said CNC programmers were next in line. More than 15 percent of organizations also selected machine operators, toolmakers, and mechanical technicians as difficult roles to fill on a regular basis. In response, says SME Director of Professional Development Jeannine Kunz, “We are dedicated to assisting hundreds of schools such as Delta College, MI, and its accelerated CNC machinist program, to train and prepare qualified students to meet the demands and requirements of today's modern manufacturing environment.”

The skills gap issue is critical for most manufacturing organizations; nearly 65 percent cited the lack of skilled employees as driving losses in productivity, and 44 percent said it also affected quality metrics.

COLLABORATION AND EDUCATION

With major concerns over issues such as patient safety, lost market opportunities, and product quality, there is a tremendous opportunity for companies to work closely with local community groups, as well as their government and educational entities to address skills gap needs. More than 50 percent of responding organizations with concerns over meeting skilled workforce demands are aware of community partnerships they could make, but they need help getting those relationships started. **■**

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