

THE SKILLS GAP:

Threat or Opportunity?



**Pennsylvania
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Understanding the Gap

The refrains from business owners, HR executives, and plant managers are deafening:

“Too many of our highly skilled people are nearing retirement.”

“Not enough young people are pursuing education in applied technology.”

“Technology and the marketplace has evolved faster than our employees’ ability to develop the associated skills.”

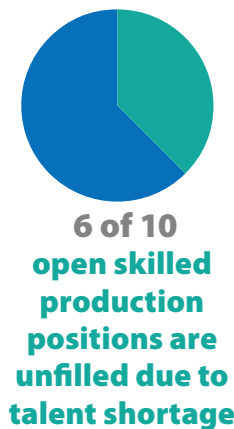
Do these sound familiar? Chances are they do, particularly in manufacturing.

The skills gap has been a trending topic across many industries. And while skeptics have gone as far as to debate its very existence, nearly everyone has come to the conclusion that it is not only real, but it is impacting companies where it matters most – the bottom line.

“The National Skills Coalition has estimated that middle-skill jobs in computer technology, health care, construction, high-skill manufacturing and other fields, account for 54 percent of the labor market, but only 44 percent of workers are sufficiently trained.”

– CNBC.com, As General Electric Upgrades Factories Closing the Skills Gap is a Top Concern, April 6, 2017

The gap can already be seen through its impacts on the available labor market which are noteworthy today and only projected to get worse. **Research from the Manufacturing Institute recently revealed that:**



3 ½ MILLION manufacturing jobs will be needed but 2 MILLION of those are expected to go unfilled

In 2015, Deloitte University Press noted that “unless it begins to close the growing skills gap and stem the loss of manufacturing knowledge resulting from retirements and fewer qualified candidates, the United States’ ability to innovate and advance its 21st century manufacturing capabilities may be in jeopardy.” These pressures are reflected in statistics from the National Skills Coalition which note that “middle-skill jobs in computer technology, health care, construction, high-skill manufacturing, and other fields, account for 54 percent of the labor market, but only 44 percent of workers are sufficiently trained.”

Harvard Business review was much more succinct in its analysis declaring,

“Employers aren’t just whining, the skills gap is real.”

How Did We Get Here?

Numerous factors are often cited as contributing to the skills gap. One could reasonably argue that the exact factors vary depending on the industry in question. Gaps in high tech skills are attributed to the explosion of new technology including automation, mobility and the associated programs that drive most devices. Deployment of those technologies into disparate segments of the economy has created additional need for tech workers in traditionally non-tech industries.

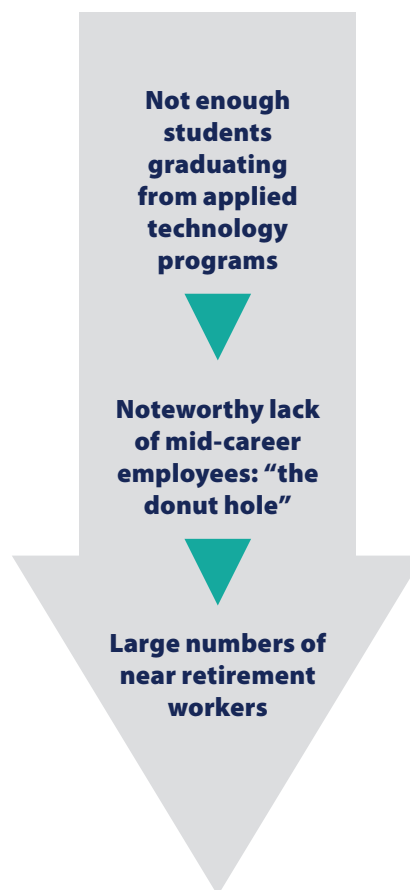
In manufacturing however, the underlying problem is not only rooted in today’s changes but in factors that are now a generation old or more. Perception of the trades, global economic forces, trends in education, and policy factors are to blame in varying degrees for contributing to a lack of students in technical programs and a related scarcity of experienced workers.

While the exact composition of the interwoven factors involved is debatable, the outcome is not. A Forbes article on America’s Skilled Trades Dilemma noted that for a couple generations “the focus (had) been to go to college...we started focusing on academic instruction, but left behind the notion of work-force education.” That shift is confirmed in figures from the National Center for Education Statistics that note from **1950 to 1990 the percentage of students in four-year college programs more than tripled. During that same period, the percentage of students enrolled in programs broadly labeled as “vocational” declined.** While that trend has begun to reverse in recent years, the negative impact of multiple generations of insufficient enrollments in technical education and neglect of workforce training is considerable by comparison.

Pain Points

While it's important to note the factors that got us to this point, business owners care far more about the consequences impacting their business. Many common pains felt today are directly tied to skill deficiencies.

Pressures are spread across the spectrum of employment for most companies. A lack of students enrolled in applied technology programs yields insufficient numbers of potential new hires into entry-level roles. Equally profound is the “donut hole,” the resulting lack of mid-career employees in manufacturing roles caused by years of insufficient numbers of people entering the manufacturing workforce. For many companies, the most urgent issue is the glut of seasoned employees nearing retirement. As these valued workers depart, there is precious little experience to take their place.



This spectrum of pressure forces companies to tackle complex challenges:



With limited funds to spend on skill improvement, what are the priorities?



Great employees do not always make great supervisors – but how can they learn without doing?



We are investing in tomorrow's technology, but how do our operators and maintenance technicians keep pace with the changes?

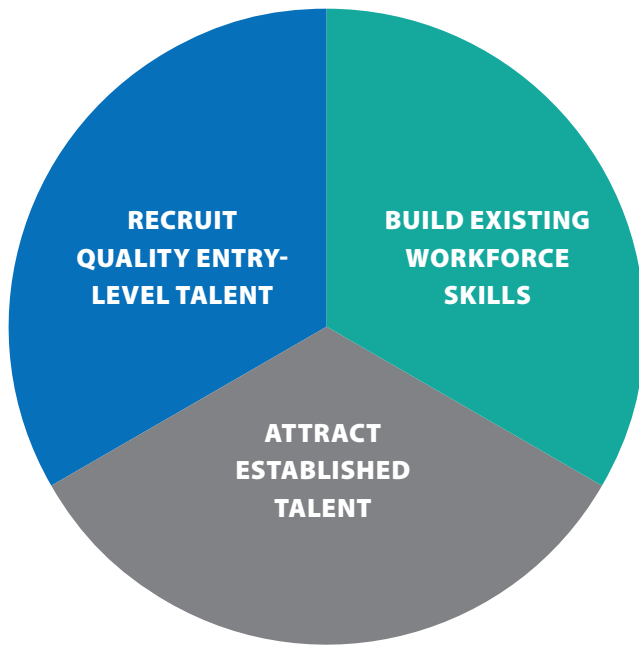


Taking time to improve skills is important, but so is production – how do I avoid disruption?

These issues echo every day, on every production line and in every boardroom. The gap is real, the causes are many, and the problems created are daunting. But they are not insurmountable. In fact, aggressively focusing on just three key areas significantly limits these pains and efficiently addressing all three can provide a competitive edge.

The Way Forward

What should be focused on in order to develop and maintain a highly skilled, competitive workforce? As noted, there is no single element to successfully overcoming the challenge – instead the optimal strategy involves three key components. A healthy balance of each is the key to fully bridging the skills gap, while an over or under-reliance on any one part creates its own set of problems rather than fixing the current one.



“But perhaps more important, companies that invest in workers will discover opportunities to improve their productivity and products or services.”

– Harvard Business Review,
Stop Waiting for Governments to
Close the Skills Gap,
January 11, 2017

► **RECRUIT QUALITY ENTRY-LEVEL TALENT** – Posting entry-level job openings and hoping for the best is not an effective recruitment strategy. Building relationships with key education providers is as critical as building relationships with vendors or customers. Time constraints are real, but a day at a college’s job fair is well worth the effort. These relationships attract top candidates BEFORE they graduate. That advertisement you wanted to post? – not so much. The best and brightest in high-demand applied technology programs are often locked up months, sometimes years, before they finish school.

► **BUILD EXISTING WORKFORCE SKILLS** – Fearful that if you invest in employees and build their skills, employees will be jumping ship and taking those skills down the road to your competitor? Don’t be. A 2015 study conducted by CareerBuilder concluded that “an overwhelming 92% of employees become more loyal to a company that invests in training them.” Compounding the problem of a lack of skill development is the mindset many employers have of training as an expense rather than an investment. New equipment purchasers consider productivity increases when justifying the cost, but similar improvements are often overlooked when considering investments in employee proficiency. Bottom-line improvements can be substantial through increases in productivity, quality improvements, fewer safety incidents, and enhanced employee engagement, just to name a few. “But perhaps more important,” notes the Harvard Business Review, “companies that invest in workers will discover opportunities to improve their productivity and products or services.” Consider these factors when creating a budget or you may sacrifice tens to hundreds of thousands of dollars in potential ROI.

► **ATTRACT ESTABLISHED TALENT** – Filling specific workforce holes may require proven contributors. Whether from outside your industry or directly from competitors, there are “rock stars” out there and plucking the right ones at the right time is an essential component to an overall skills strategy. Unlike recruiting and training where vital partnering with outside sources is necessary, this component rests entirely on the company. More specifically, it lies with the key decision makers and direction setters. Creating a culture and carefully cultivating a positive, winning atmosphere is the best way to attract top outside talent. Ignoring culture while throwing money at would-be candidates is a recipe for disaster.

Broadening Understanding

To better understand how these three pillars work best together, let's explore a sports analogy. A sports franchise has an overall leader (in business - CEO), general managers and coaches (management), and players (majority of the workforce). In order to beat the competition, a championship caliber team needs built. Since you won't be trading three people from your accounting department to a competitor for a front-line supervisor and cash, we will acknowledge the use of trades in this metaphor does not apply to business. However, all other substantial team-building tools do correlate.

A draft is to sports what the recruitment of entry-level talent is to business. These are the future building blocks of your organization, although some may be stars from day one. Some work well, others bust, but in the end this piece ensures sustainable, quality talent over time. Financially, these are your least expensive employees but they take time to become the strongest contributors. Over-rely on this strategy to building a team and you're likely to struggle competitively for some time, perhaps for years.

Your existing workforce is a sports team's player roster. Without constantly assessing the strengths and weaknesses of players and addressing their weaknesses through practice, you are not improving. Every team has key players who contribute more often to a winning effort, but the need to improve every spot on the roster is critical to success. Practice (training) involves minimal incremental cost and is the least expensive means of improvement on a per person basis. Practice every hour of every day and face the law of diminishing returns. The same applies to training – be strategic in the approach.

What if an individual cannot or will not take the steps to improve? In the end, some players (employees) are not on the same page as the rest of the organization – they either check out or are simply in the wrong place. Know when to make a roster change.

Finally, you want to attract rock stars to your organization. These are free agents (recruited professionals). They bring a proven talent set and can fill immediate needs. However, avoid the siren's call of thinking this is your go-to strategy. Too many of these players alienate the core roster and create a mercenary workforce. Given the potential for a disruptive personality to accompany these additions, it is best to add free agents selectively. For any organization, sports or business, finding the best fit is as important as finding talent. Be aware, the two often do not coincide.

The Opportunity

A healthy blend of the three strategies for closing skills gaps is the key to success for companies. But there is no universal formula for the exact allocation of effort and resources to apply to each. New, expanding companies must embrace higher proportions of recruiting and attracting talent as they increase their number of employees. Established companies should invest greater resources to developing their existing workforce.

Regardless of a company's size or maturity, a sure-fire way to lose ground in the marketplace is to ignore the skills gap or depend too heavily on a single way to overcome it. Understand the strengths and areas of opportunity within your workforce, hire the best and brightest through strong recruiting channels, and attract top talent. A proactive, thoughtful, and strategic approach to all three elements can easily transform a skills gap deficiency into a powerful competitive advantage.

Looking to bridge the skills gap in your industry?

Contact the office of Workforce Development & Continuing Education for a free consultation to learn how we can help. Call 570-327-4775, or email wdce@pct.edu

About the author

Christopher Ray is the executive director, business development at Penn College's Workforce Development & Continuing Education department. During his tenure at the College, he's overseen training program development, and worked with companies in nearly every business sector to address skill improvement needs. Employing innovative approaches to workforce development, Chris led a team at the College in developing a proprietary, competency-based assessment program to help companies identify and prioritize areas of opportunity for training. He spearheaded efforts to expand apprenticeship opportunities to companies through a blend of in-person and remote, interactive instruction to multiple manufacturing consortia. His experience includes work in manufacturing, healthcare, and training roles in pharmaceuticals and biotech.



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