



Introduction

The U.S. Chamber of Commerce Foundation (USCCF) and USA Funds are working together to explore strategies and solutions for addressing the skills gap facing America's business community, while promoting "completion with a purpose" for our nation's graduates.

In our work we have profiled a skills gap that has a significant impact on the ability of companies to grow and compete in today's economy. We have also highlighted a growing disconnect between the business community and higher education. According to a survey by Gallup, only 11% of business leaders perceive college graduates to be ready for work, whereas 96% of chief academic officers in our nation's colleges believe students are adequately prepared to start their careers. Students themselves perceive this disconnect, with only 35% feeling prepared to enter the world of work. This is especially problematic because of the increasing number of nontraditional students who are now entering higher education to improve their career opportunities. With higher education being the chief source of talent for our business community, it is of paramount importance that we begin to address this disconnect.

Since 2014 USCCF has addressed long-standing challenges around employer engagement in education and workforce systems. Through the Talent Pipeline Management initiative, we have explored applying lessons learned from supply chain management to expand the leadership role of employers as end-customers of talent supply chain partnerships. However, some concepts introduced through our work have yet to be fully explored, including how employers can designate preferred providers for sourcing talent. This requires a deeper exploration into lessons learned from supplier quality assurance and certification systems in supply chain management.

The challenge we are confronted with now is how to extend these lessons learned from supply chain management to a rapidly changing postsecondary environment where higher education accreditation plays a major quality assurance role. Solving this challenge cannot be narrowly defined in terms of how to reform accreditation; nor can it be a solution driven by government mandate, finance, and regulation. Instead we argue that there is a need for a different approach that would establish a voluntary, employer-driven talent supplier recognition and certification system—one that can complement the existing accreditation system and be used to improve government-supported quality assurance systems over time.

We begin with an overview of the Talent Pipeline Management initiative and lessons learned from supply chain management in supplier quality assurance and certification. Next, we present two approaches for expanding the employer role in



higher education accreditation and a roadmap for developing an independent, employer-driven system. We then address implications for scaling and sustaining this new approach and conclude by issuing a call to action.

Talent Pipeline Management: Building on Lessons Learned from Supply Chain Management

In 2014 USCCF released *Managing the Talent Pipeline:* A *New Approach to Closing the Skills Gap*, which argued for an employer-led approach that leverages lessons learned from supply chain management. This initiative was a response to a growing skills gap that is affecting the ability of companies to grow and compete in today's economy. It was also a response to a rapidly changing business environment that requires a responsive and flexible education and workforce system designed to meet the needs of today's business environment, not yesterday's.

This initiative started with looking at how employers could organize themselves to play a stronger leadership role in communicating and managing their talent pipeline needs for positions and capabilities that drive their competitive advantage. Employers could better manage their talent pipelines by improving how they upskill and advance incumbent workers; source experienced workers from trusted recruiting and staffing organizations; and onboard newly credentialed individuals from colleges, universities, and other credentialing organizations. As part of this work we introduced the concept of employers designating preferred providers to better signal from whom they predominantly source talent. We also examined how this approach can be used by students and workers in navigating career pathways and by government in making funding decisions.

Since the release of that report, our work has focused on building capacity within the employer community to play the end-customer role. We have explored a new organizational model for employer collaboratives that are organized by business, for business, and that carry out their work as a shared set of activities among employers seeking to close the skills gap. These employer collaboratives have focused on coordinating leading supply chain practices among a network of employers, such as demand planning and using a shared language to communicate competency and credential requirements for critical positions that are driving the skills gap. This work is currently being carried out by seven networks across the country, and the strategies are detailed in our 2015 report, *Building the Talent Pipeline: An Implementation Guide*.

As part of the implementation guide, we revisited the concept of preferred-provider designations. We called for employers to align their incentives to reward those providers that are best able to meet their talent needs. However, we have yet to fully



explore how to develop a systemic approach to designating preferred providers that fully reflects the diversity of employer needs.

The potential benefits of pursuing this approach are numerous. Employers will be able to better communicate to providers their requirements for being a talent supplier and to signal who are their preferred partners. Providers will be able to better align their services and program offerings to business requirements, while also recruiting students based on employer endorsements. Students and workers will benefit by having better information about provider partnerships or alignment with employers. Even public agencies and policymakers attempting to serve targeted populations benefit by having a better understanding of employer partnership requirements.

Lessons from Supplier Quality Assurance and Certification in Supply Chain Management

To address how employers can better designate and manage preferred-provider partnerships in talent pipeline management, we now look to lessons learned from supplier quality assurance and certification.^v

Supply chain management principles and practices have grown more important over the years as businesses seek to gain competitive advantage through outsourcing to a global network of suppliers. Although supply chain management originated with large retailers and manufacturers, it has been quickly adopted by mid-sized and small companies.

One major challenge in supply chain management is how businesses serving as the "end-customer" can ensure that their suppliers will meet their needs now and into the future. Supply chain management relies on a network of end-to-end "customer-supplier" relationships that improve performance based on quality, cost, and delivery times. To achieve the performance levels necessary to remain competitive and create shared value throughout the supply chain, these customer-supplier relationships must become strong partnerships. Such partnerships are critical in managing agile and responsive supply chains in a rapidly changing global economy.

What does quality mean in the context of supply chain management? It means that the characteristics of a product or service fulfill a set of customer requirements. In other words, something is considered to be quality if it is fit for its intended use by its customer. That is one reason why supply chain management requires deep customer-supplier partnerships in order to determine and constantly update customer requirements. Quality management systems consist of policies, objectives, and processes that are designed to ensure that the requirements of the end-customer are met. To manage and ensure quality within their supply chains, businesses assess, monitor, and evaluate the performance and effectiveness of supplier quality management systems. This has been historically accomplished through supplier quality assurance and certification systems.



Some of the earliest supplier certification systems emerged from defense agencies and manufacturers (e.g., automotive) within industrialized countries, with government and large original equipment manufacturers (OEMs) carrying out their own supplier certification systems. vi This patchwork of early systems evolved into national and then global systems that incorporated many of the leading quality management principles and practices. In order to better scale and align their emerging national and global systems, major OEMs and other stakeholders supported the adoption of standards for quality management systems, developed through the International Standards Organization (ISO).

ISO committees now develop and continuously update the ISO 9000 quality management system standards (**see Figure 1**).^{vii} These standards reflect widely shared principles that have been derived from leading business practices over many years (e.g., Baldridge, TQM, Lean Six Sigma). These principles provide the basis for quality management system requirements for application across all industries, including services. Over time, these standards have shifted the emphasis from the documentation of quality systems and processes to the performance and effectiveness of these systems in meeting customer requirements through well-defined performance metrics.

These standards have been widely adopted in global supply chains and have become the foundation for a tiered system of supplier certification with three major layers: (1) foundational requirements that cut across all industries (e.g., ISO 9001), (2) industry-specific requirements that build on top of the foundational requirements (e.g., Aviation, Automotive, Space and Defense), and (3) even more specific requirements set by individual companies (e.g., Ford, Boeing). This layered approach is designed to improve consistency and reduce redundancy and costs, while allowing each industry and business to address their unique needs.

End-customers can determine which supplier requirements are most relevant to remain in their supply chains. They can choose to require one or more of the foundational or industry-specific certifications as a condition for being considered a preferred provider and supply chain partner. They also can determine whether third-party certification by independent industry-recognized auditors is required to ensure that suppliers meet these requirements. In turn, suppliers can choose which certifications to attain based on their targeted customer markets and their own business strategies. They can also choose which parts of their businesses (e.g., facilities, business units, product and service lines) will be within the scope of the certifications they choose.

Costs for managing quality assurance and certification systems can be shared or organized in different ways by end-customers and suppliers. For example, end-customers could pay for their own auditors to verify that suppliers meet their requirements. They also could ask their suppliers to cover the cost of undergoing an industry-recognized third-party audit as a condition for remaining a supply chain partner. In turn, suppliers could proactively seek out and pay for their own certification to better position themselves as preferred providers in their targeted customer markets.



Supply chain management provides four important lessons for employers in exploring supplier certification approaches in talent pipeline management:

- 1. **Focus on End-Customer Requirements in Supplier Partnerships**: Businesses must play a stronger end-customer role in communicating their requirements and developing supplier certification systems that provide assurances that partners fully understand and can meet those requirements now and into the future. In turn, suppliers must have strong commitments and processes to develop a deep understanding of these customer requirements and to adapt quickly when these requirements change.
- 2. **Develop Business Collaboration and Alignment**: Businesses see value in collaborating around a layered approach for setting quality management system requirements. This improves consistency and reduces redundancy and costs, while allowing each industry and business to address their unique needs.
- 3. **Access a Broad and Diverse Network of Suppliers**: Businesses need to access a broad and diverse network of suppliers to compete on a global scale. A global platform for standards and certifications helps employers to navigate vast supplier networks and identify preferred partners.
- 4. **Emphasize Performance:** Businesses and their suppliers must focus on meeting customer requirements and continuously improving performance over time.

Figure 1: ISO 9000 Quality Management Standards [Pending Approval]

- 1. *Customer Focus*: The primary focus of quality management is to meet customer requirements and to strive to exceed customer expectations.
- 2. *Leadership*: Leaders at all levels establish unity of purpose and direction and create conditions in which people are engaged in achieving the organization's quality objectives.
- 3. *Engagement of People*: Competent, empowered and engaged people at all levels throughout the organization are essential to enhance its capability to create and deliver value.
- 4. *Process Approach*: Consistent and predictable results are achieved more effectively and efficiently when activities are understood and managed as interrelated processes that function as a coherent system.
- 5. *Improvement*: Successful organizations have an ongoing focus on improvement.
- 6. *Evidence-Based Decision Making*: Decisions based on the analysis and evaluation of data and information are more likely to produce desired results.
- 7. *Relationship Management*: For sustained success, an organization manages its relationships with interested parties, such as suppliers.

Addressing Employer Needs within the Postsecondary Quality Assurance Environment

Any future employer-focused quality assurance system will have to operate successfully within a rapidly changing postsecondary education and workforce services sector. This sector consists of a wide variety of education and workforce providers who receive funding from both public and private sources and who face



different federal and state regulatory requirements. It also includes a growing array of credentialing organizations that issue degrees, certificates, certifications, and new forms of micro-credentials and that also face different government regulatory requirements.

On the public side, this sector consists of public universities and community colleges that are mainly funded and regulated by state governments. It also includes a much smaller publicly funded workforce system administered through state and local governments, and their workforce boards. Public universities and community colleges anchor a larger government-regulated higher education system that includes private nonprofit and for-profit colleges and universities and proprietary schools.

Student access to the higher education system is supported largely by federal and state student grant and loan systems, including those authorized under Title IV of the federal Higher Education Act. To receive Title IV grants and loans and other financial aid, institutions and programs must be accredited by a federally recognized accreditor. In addition, state higher education agencies approve private colleges, universities, and proprietary schools to operate within their jurisdictions and to be eligible to receive student financial aid. State licensing, workforce, and veterans agencies also approve programs.

On the private side, employers make large investments in talent sourcing and training, utilizing suppliers outside and within the higher education system and the public workforce system. These include recruiters, staffing agencies, and public and private education and training providers. Employers also provide to employees tuition aid benefits that are used largely to pay tuition to accredited higher education institutions.

The federally recognized higher education accreditation system has been widely criticized in recent years. One criticism is leveled at its lack of focus on performance, especially student outcomes. Another is that it stifles innovation and bars nontraditional providers from entering the higher education marketplace. The system has also been criticized for its lack of responsiveness to employer needs. ix

Today's accreditation reform debate continues to generate new ideas and solutions; they range from moving the accreditation function to states, creating new accreditors based on the types of college or program they review, creating gradation in accreditation levels, increasing emphasis on learning outcomes and student success, and establishing other creative approaches.* However, the issue of addressing employer needs in a systemic and scalable way remains unresolved.



Given these challenges, employers and their associations can explore two different approaches to supplier quality assurance and certification. These approaches revolve around a central question: Can employers and their associations build on the existing accreditation system to implement a solution, *or* should they establish a separate and complementary system?

Approach 1: Strengthening the Employer Voice in Existing Accreditation

This first approach—strengthening the employer voice in existing accreditation—would improve accredited colleges' and universities' responsiveness to employer needs. This could be done by building on current accreditation reform recommendations to:

- 1. **Accreditation Governance and Management**: Strengthen employer involvement in governance as well as institutional and program review, which could involve mandatory membership of employers on accreditor governing bodies and review teams.
- 2. **Institutional Mission**: Require accredited institutions to declare whether workforce readiness or career preparation is part of their mission and, if so, provide information on how they evaluate success in achieving this part of their mission.
- 3. **Advisory Groups:** Require accredited institutions and programs to have employer advisory groups for all of their programs that have a workforce readiness or career preparation mission.
- 4. **Performance Measurement and Reporting**: Require accredited institutions and programs to measure and report on performance metrics most relevant to employers and to meet minimum performance levels to remain accredited.

These accreditation reform recommendations have the potential to strengthen the employer voice in the existing accreditation system. However, employers would continue to face three major challenges when taking this approach: (1) employers are but one of many stakeholders and do not play an end-customer role; (2) outcomes that matter most to employers will continue to be undervalued; and (3) employers need access to a wider marketplace of traditional and nontraditional providers, which are often constrained by—or operating outside of—the existing accreditation system.

Challenge: Employers Are One of Many Stakeholders and Not End-Customers

The current higher education quality assurance system—managed by federal and state governments and independent accreditation organizations—balances the multiple objectives of higher education, and career preparation is just one of them. As a result, this system has many stakeholders with competing priorities and is



designed to move slowly and deliberately in addressing these competing priorities over time. Employers are just one stakeholder, with no clear role as end-customers.

Accreditation organizations involve both national and regional institutional accreditors—which provide assurances about universities and colleges—as well as specialized accreditors, which provide assurances about specific programs, such as business, engineering, and nursing. Accreditation is operated by higher education, for higher education. Accreditors are self-financed by membership fees from the institutions and programs they accredit. They also are self-governed by their members, with only limited external public representation, and they carry out their mission through a faculty-driven peer review process.xi

Since 1965 federally recognized accreditors have served as the federal government's gatekeepers for Title IV student grants and loans, which are based on a very broad set of federal guidelines. Today access to these resources is critical to the financial viability of most higher education institutions, particularly in a time of skyrocketing tuition and fees. The served as the federal guidelines are the federal guidelines and loans, which are based on a very broad set of federal guidelines.

Additional layers in this system are state agencies. This includes state higher education agencies that operate their own quality assurance systems used to approve both accredited and non-accredited higher education institutions and other non-degree-granting providers. It also includes state professional and occupational licensing and regulatory agencies that approve programs that prepare students for state licenses. Workforce development agencies also have quality assurance systems for funding and regulating an even broader array of education and workforce providers operating within their states.

Employers operate along the periphery of this system and do not play a meaningful role in terms of its governance or operations; they are seen as one of many stakeholders. While employer partnerships in higher education are receiving more attention than ever before, employer input is still largely driven by participation on advisory groups or through customized training projects and industry initiatives to address a major skills gap. Although employers play a larger role in publicly funded workforce systems through local workforce boards and sector partnerships, these systems are relatively small in size and scope and address only targeted populations.

The ability of accreditation to attend to the needs of employers is highly unlikely, given that their business model is built on faculty-driven peer review and that accreditors are financed by membership dues from the very organizations they accredit. Even specialized accreditors with the strongest involvement of employers are influenced more by the professions that were instrumental in creating them. The customer requirements derived from these professions and their professional



organizations may or may not reflect the most critical employer requirements. Both institutional and specialized accreditors are simply not built to be responsive in meeting employer needs and requirements—at least not to the extent that many employers need them to be.

Challenge: Outcomes that Matter Most to Employers Are Undervalued

Accreditation reform is attempting to move the focus from inputs and processes to outcomes; however, they have been doing this for decades, with limited progress to date. They still have a long way to go in getting accrediting bodies—and the institutions and programs they accredit—to agree on an approach to performance measurement and reporting that would be useful to outside stakeholders, including employers. Even with reform, accreditors will face major challenges in addressing employer needs, in large part because outcomes reporting will most likely reflect the multiple objectives of higher education stakeholders and lack clear incentives for addressing the outcomes that matter most to employers.

For example, accreditation reforms addressing student learning outcomes do not always require that institutions and programs develop and validate these outcomes with employers. As a result, accredited institutions and programs could measure student learning outcomes and meet student learning goals without closing the gap between what employers need and what colleges produce. Even if institutions and programs validated their learning outcomes with employers, they still might not address the assessment and credentialing requirements employers require.

In fact, government accountability and performance metrics addressing program completion and employment outcomes could actually have unintended negative consequences for employers. For example, institutions could increase their completion rates and ramp up their career transition services to meet job placement numbers in ways that drive up employer costs in recruitment and screening of new hires. They could do this by graduating and referring more students who do not meet employer requirements, resulting in higher screening and assessment costs and potentially higher onboarding and turnover costs.

In contrast, supply chain management uses performance measures that balance time, quality, and cost, and create shared value throughout the supply chain. For example, the Talent Pipeline Management initiative developed a shared performance metric called "time-to-full productivity" that incents education and workforce providers to accelerate and optimize preparation, onboarding, and career advancement in partnership with employers. This measure ensures that employer competency and credentialing requirements are met, onboarding time and costs are reduced, and employers can achieve a return on investment more quickly. It also creates shared value for students and public funders because it reduces time to



earnings such that students can begin to pay off loans more quickly and government can collect income tax revenue much sooner.

In summary, the ability of accreditation reform to improve responsiveness to employers through performance measurement and reporting is limited because of competing objectives and priorities and a government accountability approach that does not incent deep employer-supplier partnerships through shared and consistent performance measures.

Challenge: Employers Need a Larger and More Diverse Marketplace of Talent Suppliers

Although U.S. higher education accreditation covers the largest share of the higher education system, it does not cover the entire rapidly growing credentialing marketplace or the full range of talent providers operating on a global scale.

Higher education accreditation does not address the non-credit-certificate market within and outside the higher education system, including educational certificates awarded by nontraditional providers, such as boot camps. It also does not cover the rapidly growing industry and professional certification market that is increasingly being covered by alternative recognition (e.g., Manufacturing Institute) and accreditation organizations (e.g., American National Standards Institute). These industry and professional certifications often have their own education and training provider recognition programs, such as those operated by the National Institute for Metalworking Skills (NIMS), American Welding Society (AWS), and Automotive Service Excellence (ASE).xiv In addition, accreditation does not cover the growing array of nontraditional providers of educational certificates, including microcredentials (e.g., digital badges).xv

This higher education accreditation system also does not cover the growing array of public and private talent pipeline management partners that provide talent recruitment, screening, onboarding, and retention services separate from—though in cooperation with—education and training providers. These include intermediaries that help orchestrate and manage talent supply chains, like WorkAmerica.xvi

Finally, this higher education accreditation system addresses mainly colleges and universities operating within the United States and does not have clear recognition and jurisdiction in mature and emerging global markets. Employers are increasingly sourcing talent on a global basis and are developing talent pipelines that cross national borders. Although many accreditors are now seeking to accredit institutions and programs beyond the United States, they are still struggling with how to move to a global platform.



In all, the higher education quality assurance system anchored by independent accreditors does not address the full scope of employer-led talent pipeline management systems and the full range of supplier partnerships that could develop in these systems.

Approach 2: An Employer-Led Quality Assurance and Supplier Certification System

The second approach—an employer-led quality assurance and supplier certification system—would empower the business community to establish their own system based on leading practices in supply chain management. Such a system would be supported through substantial incentives provided by employers, including priority access to jobs, work-based learning opportunities, and tuition assistance. It would also provide needed leverage for accreditation reform initiatives designed to improve responsiveness to employers among accredited colleges and universities.

We propose that such a system would have three major building blocks: (1) the fundamental quality management principles for building supplier certification requirements, (2) a layered approach with different levels of requirements that reflect the diversity of employer needs being met, and (3) a supplier recognition system that includes supplier certification.

First, such an approach would need to build on widely accepted quality management principles that have been established by the international community for use in assuring quality in customer-supplier relationships (e.g., ISO 9000, Baldridge, TQM, and Lean Six Sigma). These include a strong focus on managing end-customer needs and requirements, and having the necessary processes in place to produce consistent and reliable outcomes for those customers.

Second, in order to address the diversity of needs within the employer community and to coordinate and align existing industry initiatives, we propose a layered approach to quality management system requirements and supplier certification. For example, a layered approach can include levels that provide clear roles for national, state, and regional business organizations as well as individual employers and employer collaboratives. These organizations could design each layer to have increasing levels of requirements, starting with the most basic requirements that are common across all employers and narrowing to more specific requirements that address the needs of a particular industry or employer.

Third, employers could use this layered approach to build their own supplier quality assurance and certification system in cooperation with other employers. They could specify not only their foundational, industry, and employer-specific requirements,



but also the level of assurance that any "recognized preferred supplier" would have to provide to show evidence that they meet these requirements. This level of assurance could range from (1) self-declaration based on self-assessment and internal auditing to (2) third-party certification by independent, industry-recognized auditors.

The scope of this approach would include the full range of education and workforce partners that could become suppliers of talent throughout the world, including accredited higher education providers. It also would be neutral with respect to how providers organize and integrate their services and credentials—as long as they can provide the necessary assurances to be a recognized supplier. This would result in incremental and disruptive innovation among both existing and new providers.

Similar to the first approach, building such a system would face two challenges: (1) getting employers to agree on a common supplier certification approach, and (2) providing incentives for traditional and nontraditional providers to participate, given the incentive structure already built into the existing accreditation system—namely access to Title IV student grants and loans and to related public funding.

Challenge: Employer Collaboration and Alignment

An employer-led quality assurance and supplier certification system would require an unprecedented level of collaboration among businesses and their associations. Based on lessons learned from supply chain management, even the largest employers cannot establish cost-effective supplier certification systems without collaboration, even with their competitors. Although the Talent Pipeline Management initiative has found substantial interest among employers to work together, any employer-led supplier certification system would require even more extensive collaboration and coordination.

This approach also would require employers to implement supplier quality assurance and certification as part of a larger and more comprehensive talent pipeline management strategy. Supplier certification is but one part of a greater whole. This approach would, minimally, require employers to improve how they work together to communicate their competency and credentialing requirements and how they align their performance measures and incentives to support end-to-end talent pipeline performance.

Finally, this approach also would require the alignment of existing industry efforts, such as sector-based initiatives led by organizations like the Manufacturing Institute and Center for Energy Workforce Development (CEWD). It would also need to involve program-level accreditation led by industry certification organizations, such as ASE and NIMS. Lessons learned from supply chain management provide insights



into how these existing systems can be better aligned, but this will remain a challenge.

Challenge: Supplier Incentives to Participate and Become Certified

If employers and their associations do come together to support an employer-led supplier certification system, then the next challenge will be whether employers can provide sufficient incentives for talent suppliers to participate and become certified.

Employers do control some major incentives, such as priority access to jobs, work-based learning opportunities, corporate training investments, and tuition assistance that is equal to or greater than the financial incentives provided through the public sector. However, the incentive structure already built into the existing accreditation system—namely, access to Title IV student grants and loans and to related direct federal and state investments—is still substantial. Any solution would have to provide clear guidance to accredited providers on how they could meet employer requirements while also meeting accreditation requirements.

On the other hand, federal and state governments are launching major initiatives to improve employer engagement and increase returns on public investment in the form of employment and earnings for program completers. Students and workers themselves are seeking information on which providers can give them the best chances to advance their careers. In this changing environment, an employer-led supplier certification system could improve labor market transparency and provide better assurances to both government and students.

The Case for Moving Forward on the Employer-Led Approach

As described above, employers and their associations can explore two different approaches to supplier quality assurance and certification, with one focusing on accreditation reform and the other on creating an independent employer-led system.

The first approach can build on current accreditation reform initiatives to better address employer needs. This approach has the potential to achieve some short-term benefits for employers. However, this approach also faces major challenges that will not be easily overcome, including the limited scope and coverage of accreditation within the larger global postsecondary education and workforce sector.

The second approach has advantages in allowing employers to use lessons from supply chain management to develop their own global talent supplier system that can best ensure their competitiveness. However, this approach also would face



challenges, including whether employers would come together around a shared approach and create sufficient incentives for suppliers to participate. While these challenges are significant, this approach also has the greatest potential upside and has the added benefit of providing employers with more leverage in pursuing the first approach.

We propose that employers and their business associations continue to pursue accreditation reform but, more important, also begin exploring an independent employer-led approach. The rationale for this approach is based on two arguments: (1) it will allow employers to develop talent pipeline solutions that best address their needs and provide competitive advantages in the global talent marketplace, and (2) it provides additional incentives for institutions and programs to pursue higher education accreditation in ways that meet both employer and other stakeholder requirements.

Roadmap for an Employer-Led Quality Assurance and Supplier Certification System

In exploring this approach, we propose a bottom-up process that begins with a business coalition supporting and learning from employer-led partnerships already under way and concludes with scaling the system nationally and evenly globally (see Figure 2). This effort cannot be solved through government action or mandate. It is up to leading business associations to work together with their member companies to design and implement a solution that addresses their needs first and foremost.

As such, the first step is to form a nationwide coalition of national, state, and regional business organizations to identify employer-led initiatives that are best positioned to lead the co-development and pilot-testing of the key components of a new system. This coalition should include a diverse network of initiatives representing multiple industry sectors and regions where the skills gap is most acutely felt and where employers are most likely motivated to take action to improve their competitiveness. This includes industries related to science, technology, engineering, and math (STEM), such as manufacturing, energy, information technology, and health care.

The second step is for this coalition to co-develop the system, based on learnings and experience from a series of pilots. The pilots should examine and evaluate the key building blocks of the system and whether employers and their collaboratives could develop and implement supplier recognition and certification systems as part of their larger talent pipeline strategies. This shared learning experience will help to co-develop and document the system's key components and will also address whether employers and suppliers have the incentives and capacity to participate.



In the third step, lessons learned from this co-development and pilot-testing can then be used to further develop and scale this approach as well as explore how to sustain it within the postsecondary education and workforce environment. The final step would be to make changes based on learnings from the pilot-test and scale the system to address more industry sectors. This would include major decisions about how to build, finance, and support the ongoing management and rollout of the system.

Figure 2: Roadmap for Exploring the Employer-Led Approach

Step 1: Build a Business Coalition

Step 2: Co-Develop and Test the System's Key Components

Step 3: Scale, Improve, and Sustain the System

Considerations for Developing the System's Key Components

One of the more challenging steps in the roadmap is how to organize the codevelopment and testing process. Based on lessons learned from supply chain management, this effort should focus on the following key components or building blocks needed for a national or even global solution: (1) building consensus on foundational quality management principles, (2) organizing and communicating talent supplier requirements using a layered approach, and (3) recognizing and certifying participating talent suppliers. We also include the basic questions that should be addressed when considering each building block.

Quality Management Principles for Talent Suppliers

Any quality management system needs to have foundational guiding principles from which requirements are set. Based on leading industry practice, we propose the pilot to explore the following foundational quality management principles for talent suppliers:

- 1. *End-Customer Focus* Top leadership commitment to identify and meet employer-partner needs and manage relationships effectively, including buy-in of staff at all levels of the organization.
- 2. *Managing Customer Requirements* Establishing valid and reliable processes for determining customer competency and credentialing requirements, and assessing and documenting whether these requirements are being met in cooperation with supply chain partners.
- 3. *Performance Management and Continuous Improvement* Measuring and reporting performance to customers, suppliers, and other partners and using data to drive continuous improvement throughout the end-to-end talent pipeline.



Any employer-led quality management system for higher education should minimally include the principles specified above. However, to further refine and scope out the foundational principles, the pilot would need to address the following questions:

- 1. Can employers build consensus around foundational quality management principles for talent suppliers?
- 2. What additional principles should be considered, and how should they be prioritized?
- 3. Which principles are most critical for use in a pilot project?

Organizing Quality Management Requirements through a Layered Approach

Building on the foundational principles, the pilot would need to explore the layers of increasing and more specific requirements that need to be mapped out to meet the needs of a large and diverse business community. These layers would start with the most basic requirements common to all employers and extend to more detailed requirements for an industry/sector, all the way to addressing the needs of an employer or employer collaborative. Layers would not be mutually exclusive, but would build on one another to demonstrate how advanced talent suppliers are in meeting employer needs.

Each level would lay out how suppliers would manage customer needs, including the processes they would use to identify and validate competency and credentialing requirements and how they track outcomes and performance. It also would address how they assess and document the attainment of these competencies and credentials and how they share this information with employers. Requirements for each level could be expanded to also include how suppliers help manage onboarding talent into the workplace, provide work-based learning, and address regulatory requirements.

An example of three layers for the pilot could include the following:

1. Level 1: Addressing Common Employer Needs – The first layer could focus on the foundational requirements that are common across employers of all sizes and across all industries. More specifically, this level could lay out guidance on how to address foundational skills sometimes referred to as "employability" skills.xvii This level could also establish required performance metrics and the ability to track basic outcome data, such as completion rates, program duration, cost, and employment and earnings. Organizations that set these requirements could include large national business associations that cut across industry sectors, such as the U.S. Chamber of Commerce and the Business Roundtable.



- 2. Level 2: Meeting the Needs of an Industry or Sector This next level could layer additional requirements for how talent suppliers manage industry-based or sector-specific customers (e.g., manufacturing and health care).xviii This level could address the technical skills needed over and above common employability skills.xix In addition, this level could specify performance metrics tied to work-based learning, employment, and industry certification. Organizations that could set requirements on behalf of their industry include the Manufacturing Institute and CEWD.xx These organizations could be complemented by other industry organizations that provide more specific program-level requirements, such as those operated by the NIMS, AWS, and ASE.
- 3. Level 3: Supplying Talent to an Employer or Employer Collaborative The final level could build on the requirements specified under the first two levels and include more specific requirements that are needed by an individual employer or employer collaborative. This third level could address more specialized competency and credentialing requirements as well as additional performance and outcome metrics, such as number of hires, number retained, time-to-full productivity, and time-to-career advancement.* These additional and more specialized requirements could be developed and updated by employers through local chambers of commerce and state/regional business associations.

The above levels and requirements are an example of how an employer-led quality management system pilot could be organized (**see Figures 3 and 4**). However, in order to specify the number, type, and requirements for each level, the pilot would need to provide input on the following questions:

- 1. How many layers should an employer-led system start with, and which business associations should take a leadership role in representing employers at each level?
- 2. What are the types of competency and skill requirements for each designated level, and what process do the end-customers use to set and update those requirements?
- 3. What are the related performance requirements and priority outcomes for each designated level?



Figure 3: Example Layers of Employer Quality Assurance

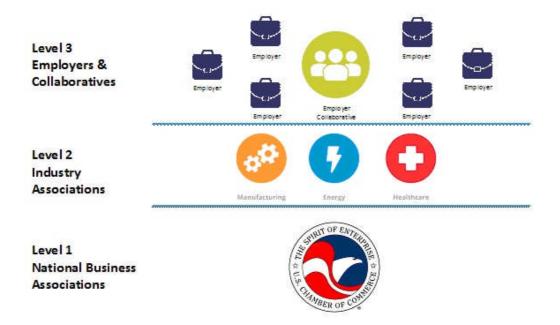


Figure 4: Example Principles and Requirements for Supplier Quality Assurance

Principle	Level 1 Requirements	Level 2 Requirements	Level 3 Requirements
	The state of the s	Ø O	*
End-Customer Focus	National business associations e.g., U.S. Chamber of Commerce and Business Roundtable	National or regional industry associations e.g., National Association of Manufacturers and Center for Energy Workforce Development	Local chambers of commerce, economic development organizations, or employers e.g., Vermilion Advantage or Alcoa
Managing Customer Requirements	Common employability skills e.g., teamwork, problem solving, and communication	Level 1 plus industry-specific competencies and credentials e.g., machining and NIMS	Level 2 plus more specific competencies, credentials and other hiring requirements e.g., security clearances
Performance Management and Continuous Improvement	Basic supplier effectiveness measures e.g., completion rates, program duration, cost, and employment and earnings	Level 1 plus integration with certification data held by third-party organizations e.g., certification organizations	Level 2 plus integration with applicant tracking systems and HRIS e.g., hires, retention, time- to-full productivity, time-to- career advancement



Talent Supplier Recognition and Certification

Next, the pilot would need to investigate a systemic way of recognizing and certifying suppliers that can address talent pipeline needs. This system could provide employers with multiple options in setting the level of assurance they require for a supplier partner. These options could range from (1) talent suppliers self-declaring their commitment, capacity, and performance in meeting requirements to (2) having these self-declarations confirmed by an industry-recognized third-party auditor.

- 1. Self-Declare As a first step, employers could require that all potential partners self-declare—based on a self-evaluation and internal audit—that they have the commitment and quality management systems in place to meet employer requirements. Once an employer or employer association publishes its requirements, it is possible for a provider to benchmark and evaluate themselves against those requirements. They could make their self-declared commitments and capabilities known by publishing their information to a public website or registry. Employers could then review this information and make their own determination on whether this would satisfy their requirements for a partnership, or whether they need additional assurances.
- 2. Audit Next, if needed, employers could require suppliers to undergo a more extensive auditing process that results in formal certification. This is where the requirements-setting organization or their designated industry auditors could perform a fee-based review, starting with the information submitted through a self-evaluation. This can be done either as a desk audit (i.e., review of submitted materials) or a site visit with interviews and inspections.xxii This approach achieves economies of scale, where a talent supplier undergoing an audit can meet the requirements of a network of businesses represented within an industry or by an employer collaborative.

Talent suppliers could choose which recognitions and certifications to attain based on their targeted employer markets and their own competitive strategies in the postsecondary education and workforce sectors. They could also choose which parts of their operations (e.g., campuses, colleges, programs, services) will be within the scope of the recognitions and certifications they choose.

Any pilot exploration of a systemic, talent supplier recognition and certification system that leverages a layered approach for setting requirements would need to address the following questions:

- 1. Can employers across industries collaborate on a common approach for supplier recognition and certification?
- 2. Can a fee-based certification provide the necessary incentives that outweigh the costs for suppliers to participate?



3. What roles do industry and business associations need to play at the national, state, and regional levels, and how will these roles be financed and sustained?

Exploring How to Scale and Sustain an Employer-Led Approach

This piloting process also should be designed to address the major opportunities and challenges in scaling and sustaining this new employer-led approach without significant government involvement.

As argued earlier, this complementary, employer-led approach to quality assurance must be developed by employers and their associations to use in their own talent pipeline management systems and cannot be managed, financed, and regulated by government. This approach will take time to mature as an employer-driven quality assurance system that complements today's existing higher education accreditation system. With this in mind, it would be ill-advised to tie access to Title IV federal grants and loans to this approach while the system is still developing its unique value proposition for the employer community and the talent suppliers that partner with them.

Given these parameters, this piloting process should be designed to explore at least three major opportunities and challenges in scaling and sustaining the system: (1) how to integrate supplier recognition and certification into broader employer-led talent pipeline management initiatives, (2) how to better leverage employer financial incentives for suppliers to participate, and (3) how to better communicate supplier recognition and certification in ways that create shared value for employers and suppliers as well as for students, job seekers, and government.

First, and most important, we need to continue to encourage employers to work cooperatively in managing the talent pipeline. Quality assurance and supplier recognition systems have to be part of a larger talent supply chain management effort, which includes how businesses work together to communicate competency and credentialing requirements and related performance metrics. We must continue to find ways of incentivizing and supporting employer collaboration and to support implementation efforts at the state and regional levels.

Second, we need to explore how employers can better leverage their own financial incentives to encourage providers to participate. For example, employers could instead reward talent suppliers through more targeted tuition reimbursements and the alignment of training resources. Partnerships could also be forged with private lenders to secure risk-reduced loans with better interest rates or income-sharing agreements for students and workers that access certified talent suppliers. These types of market-based incentives would go a long way to demonstrate the system's viability and should be explored within the context of the pilot.



Third, we need to explore how employers could better communicate which suppliers are recognized and certified in ways that create value for suppliers, students and job seekers, and government. For example, employers could identify their preferred providers for use in public and private career guidance and information systems used by students and job seekers. Talent suppliers themselves can communicate their recognition and certification status through the very same systems to better market to and recruit students. This information can also be leveraged by public-sector partners providing career services for targeted populations, including providers operating under the Workforce Innovation and Opportunity Act (WIOA), and career and technical education programs that cut across K–12 and community college systems. Both WIOA and career and technical education also could use this information to define industry-recognized credentials.

Call to Action

There is no time to waste. The skills gap continues to worsen while government policies to improve employer responsiveness through accreditation reform continue to fall short. More employers and business and industry associations now see the need and opportunity to explore an employer-led solution during a time of growing debate on the role of government in higher education, career and technical education, and workforce development.

For too long the debate over how we define and recognize quality in our education and workforce system has been narrowly framed around the 6,000 or so colleges and universities eligible to receive Title IV funding under the existing accreditation system.

If we are to truly unlock the value that employers have to offer, we need to challenge how the debate has been framed and open ourselves up to new solutions. Lessons learned from supply chain management offer a new way of thinking and invite employers to play a new leadership role from their unique position. This paper has argued for an employer-driven talent supplier recognition and certification system that can complement the existing accreditation system and be used to improve government-supported quality assurance over time. Such an approach can address employer requirements in today's economy as well as improve outcomes for students and workers in postsecondary education and training.

Presented here is an approach as well as a roadmap for bringing about such a system. We hope it invites a dialogue—but more importantly spurs us to action.

While the challenges for building a new system are sizable, the benefits are also numerous, including a more responsive marketplace of providers who can help



close the skills gap and improve outcomes for students and workers. Such an initiative would not only galvanize employer collaboration but also help reframe the public policy debate for years to come.

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End Notes

¹ Lucia Anderson Weathers, "Today's Business Leaders Say, 'It's What You Know, Not Where You Go' When Making Hiring Decisions, New Study Shows," *Lumina Foundation*,

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- Requirements can also be set for capabilities within or across industries (e.g., automotive service, machining, and software development).
- xix Skill requirements could also address the coordination of interdisciplinary and cross-functional skill sets (e.g., inter-professional health care).
- ** For information about the Manufacturing Institute's M-List, visit http://www.themanufacturinginstitute.org/Skills-Certification/Educator-Resources/M-List/Application/Criteria-for-Membership/Criteria.aspx; For information about the Center for Energy Workforce Development's approved course provider, visit http://www.cewd.org/curriculum/about-the-eif-certificate.php.
- xxi In Building the Talent Pipeline: An Implementation Guide, we lay out an approach for employers to develop a shared language for how they communicate their competency and credentialing requirements. This shared language is useful for not only specifying how their talent needs are similar, but how they are different. Such an approach empowers providers with the ability to customize skill requirements within the talent supply chain. Through our needs assessment process, employers can begin with a list of industry-recognized requirements provided by national organizations, such as NAM, or by other trusted entities, that employers can then add to, subtract from, and otherwise modify as needed to meet their requirements. This is an example of how Level 3 requirements can build on and enhance the Level 2 requirements set by a national business and industry association.
- Ongoing site visits would be needed to ensure continued adherence to the requirements and to account for new or changing requirements.

