QUALITY PATHWAYS

EMPLOYER LEADERSHIP IN EARN & LEARN OPPORTUNITIES









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We exist in an economy that competes on talent. Yet we have jobs without people and people without jobs. Business growth is hindered because we do not have the right talent needed to take on new business at the right time. College graduates are struggling to find jobs while overwhelmed by student loan debt. Workers who are out of a job have limited—if any—options to learn a new skill set, upgrade their skills, or reenter the workforce.

This situation will not fix itself, and employers cannot fix it alone. We need everyone—businesses, workers, government, and our nation's education and training providers—working together to solve the challenges of our time.

As the business community, we recognize the need to act. We can ill afford to sit idly by and let an economy poised for growth stall because we do not have the most important ingredient for success: a skilled and competitive workforce. The consequences of inaction are unacceptable. America and its people deserve stronger economic growth and a more optimistic view on the American Dream. Let's be honest: America needs a new pathway to opportunity.

The U.S. Chamber of Commerce and the National Association of Manufacturers have joined together to take action and put forward a new vision for our nation's education, workforce, and credentialing system. This paper advances a solution building from a bold idea for improving employer leadership and investment in a wide variety of earn and learn opportunities, including high-quality internships and apprenticeships. If we are successful, we can scale new earn and learn pathways for millions of people that result in more jobs, more opportunity, and more growth.

WE INVITE YOU TO JOIN WITH OUR ORGANIZATIONS AND CREATE NEW PATHWAYS TO OPPORTUNITY FOR OUR NATION'S LEARNERS AND WORKERS.

THOMAS J. DONOHUE

President and CEO U.S. Chamber of Commerce **JAY TIMMONS**

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Introduction

Companies are struggling to close a skills gap that is negatively impacting their ability to compete and grow in a global economy. The skills gap is also negatively impacting our workforce, with students and workers finding it more difficult to connect to jobs. Education and workforce intermediaries as well are finding it more difficult to assist employers, job seekers, and students in closing the skills gap.

TODAY, LEADING EMPLOYERS ARE EXPLORING NEW BUSINESS MODELS, EMPLOYMENT RELATIONSHIPS, AND TALENT SOURCING AND DEVELOPMENT STRATEGIES THAT GIVE THEM THE AGILITY AND FLEXIBILITY TO REMAIN COMPETITIVE IN A RAPIDLY CHANGING, INNOVATION-BASED ECONOMY.

Many talent sourcing and development partners, including universities, colleges, and other training and credentialing organizations, are also seeking new connections and partnerships with the business community to address employer needs and thereby expand career opportunities for students and workers.

As part of these strategies, employers are exploring innovative earn and learn models that have the potential to improve communication and build stronger connections with education and workforce partners. These include apprenticeships, paid internship programs, and other work-based learning arrangements.

This innovation is happening at a time of growing federal and state debate on higher education and workforce policy and increasing calls for bold actions. In each debate there are calls for improved alignment between our nation's education and workforce investments and the changing workforce needs of employers in a growing, dynamic economy.

These reform initiatives, however, are too often carried out within traditional public/private and higher education/workforce development silos that do not provide the flexibility needed to support the full range of employer talent sourcing and development strategies.

THIS NATIONAL FOCUS ON A NEED FOR STRONGER EARN AND LEARN PATHWAYS PROVIDES A UNIQUE OPPORTUNITY TO BREAK DOWN TRADITIONAL SILOS AND DEVELOP A NEW VISION, ONE WITH STRONGER CONNECTIONS BETWEEN EMPLOYERS AND POSTSECONDARY EDUCATION.

The success of this initiative will require employer leadership and investment in earn and learn pathways at a scale previously unheard of.

We cannot have an expansion of earn and learn pathways without ensuring they are high quality and create shared value for learners and employers. We are at a crossroads in terms of how to build these new pathways.

One approach is to rely on government-driven investments and quality assurance systems based on existing accreditation models to proliferate, regulate, and manage these new pathways. Another approach is to rely on industry best practices for establishing standards and auditing systems that manage quality in ways that expand employer leadership and investment in earn and learn pathways.¹

This paper argues for the latter approach and makes the case that now is the time for the business community to organize and lead in the earn and learn space. It provides a roadmap that allows for immediate field testing of a new employer-led system as well as eventual scaling options based on lessons learned and established best practices.

PART I

Addresses the need for stronger earn and learn pathways for learners and employers.

PART II

Outlines the features of high-quality pathways and provides an approach for how to expand business leadership and investment in them through an employer-led quality assurance system.

PART III

Lays out the core design features of this system, including an industry-led standards-setting process and a separate auditing system that can recognize programs across a continuum of earn and learn opportunities.

PART IV

Lays out a road map for the business community to work with education and workforce stakeholders to build and grow a new system.

The Need for an Alternative Approach

Employer-led earn and learn pathways have the potential to close the skills gap for employers and learners, and improve access and success of learners, including working adults, in postsecondary education. These pathways could better integrate public and private investment in ways that create shared value for employers, learners, and government.

CLOSING THE SKILLS GAP

In today's economy, the ability to succeed increasingly depends on finding, onboarding, and retaining a skilled and competitive workforce that can drive growth and innovation. However, finding, sourcing, and retaining talent is proving more elusive, with positions going unfilled for longer periods and with higher onboarding and training costs.

Our economic growth depends on the ability of companies to access the right talent at the right time; and an estimated two-thirds of the jobs on which our economy depends will require some level of postsecondary education, training, or credentialing.² Today's higher education and workforce education systems struggle with aligning to the needs of the new economy in ways that provide scalable pathways to opportunity in growing industry sectors. At our present rate, we will be significantly short of meeting the needs of the new economy.³

Part of the reason for this shortfall is that many of these systems have not demonstrated sufficient flexibility or responsiveness in helping employers close a growing skills gap. For example, only 11% of employers believe college graduates are prepared for the workforce and only a fraction of employers participate in the nation's public workforce system. This is happening at a time when nearly half of open positions remain unfilled. Currently, we are on track to have over six million unfilled positions, a significant obstacle to our country's economic growth and competitiveness.⁴

PERHAPS THE BIGGEST CHALLENGE OF ALL IS ONE THAT IS YET TO FULLY TAKE EFFECT.

Leading economists predict that trends in globalization and automation will drive continued disruption in our labor market, requiring more frequent adjustments in how employers organize their workforces and define skill requirements. Some economists predict that nearly half of the jobs available today may undergo major changes and many may be rendered obsolete in the new economy. This means that students and workers can no longer rely on their initial education or credential in a constantly changing economy, further challenging our historic understanding of college access and completion as a safe and secure investment in one's future. More lifelong learning opportunities are needed with shorter time to earnings.

IMPROVING ACCESS & SUCCESS FOR LEARNERS

For nearly half a century, the higher education system has been seen as the gateway to the middle class. As a result, public policy has prioritized expanding access to higher education opportunities, leading to significant increases in both college attendance and credential attainment. Over 20 million learners are participating in the higher education system,

with over \$400 billion in public investment annually through grants and loans.⁶

However, even after spending over \$300 billion in Pell grants since 2000,7 major gaps and challenges remain. For example, there is a significant opportunity gap and an uneven access to higher education for low-income and underrepresented populations. And while more people are accessing college, students are taking longer than ever to complete their education, if they complete it at all. In fact, completion remains elusive for nearly 40% of students who attend degree-granting programs. Even with a college degree, many students falter in their transition to a career, with over half of B.A. holders under age 25 still underemployed or unemployed.8

In addition to these inequities and uneven outcomes, students today struggle with record levels of student debt. Student debt has become the second-highest level of consumer debt and is estimated at over \$1.3 trillion. Many students have resorted to defaulting on loans given their inability to make payments, a troublesome trend that continues to grow. This debt burden and opportunity cost have fueled anxieties about the value of a college education.

One of the biggest changes is the customer of the higher education system. A majority of students today represent older, working adults seeking to skill up and gain greater economic mobility. This is in

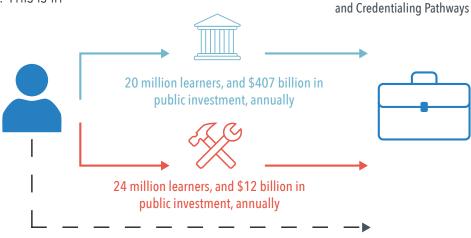
contrast to the traditional first-time, full-time 18- to 24-year-old demographic that has defined higher education's customer base for decades. ¹⁰ This shift did not occur overnight, but reflects the constant changing needs of the economy, requiring more workers to skill up and adapt over the course of their careers, as well as the growing need for more upward mobility among lifelong learners.

Another consideration is that four-year and two-year higher education institutions are not the only pathways to a job or career. Our nation's workforce development system is composed of dozens of funding streams administered through a complex array of federal and state agencies that deliver workforce services. But the amount of funding in our workforce system pales in comparison to what is invested in higher education institutions and programs.

Workforce programs provide services to nearly 24 million learners annually at a cost of about \$12 billion.¹¹ Even with this investment, these programs have struggled to engage employers and have achieved uneven results.

What is more, there remains a sizable portion of our population that has either dropped out of college or has received no postsecondary education, training, or credentialing. For many, the current career pathway options are ill-suited to meet their needs. Today, approximately 43 million people have taken neither the higher education nor workforce pathway, and approximately 19 million have received some postsecondary education but have not attained a credential of value (see Figure 1).¹²

FIGURE 1
Current Publicly Funded Learning



43 million un-served individuals, ages 25-64; 19 million individuals, ages 35-64, with some postsecondary education but no credential

EMPLOYERS & PARTNERS TAKING ACTION

Recent employer-led initiatives and related federal and state policy debates provide a distinct opportunity to build a stronger earn and learn pathway within new public-private education and workforce systems that meet these growing challenges for both employers and learners.

Leading employers are exploring new business models, employment relationships, and talent sourcing and development strategies. These new approaches provide them with the agility and flexibility to remain competitive in a rapidly changing innovation-based economy and are consistent with their business models and employment relationships. These strategies are refining employer roles and building stronger communication and connections with both traditional and nontraditional talent partners.

As part of these new strategies, many employers are exploring innovative earn and learn models, ranging from apprenticeship to high-quality paid internships, that have the potential to improve communication and build stronger connections with proven education and training models.¹³

EXAMPLE

Toyota has partnered with Bluegrass Community and Technical College on the Advanced Manufacturing Technology apprenticeship program for entry-level technician jobs. That program has since grown to include an entire statewide network of community colleges and employer partners as part of the Kentucky Federation for Advanced Manufacturing Edition and has expanded to 14 programs in eight states.

THESE APPRENTICESHIP PROGRAMS ARE EMPLOYER-LED AND FLEXIBLE AND PROVIDE OPPORTUNITIES FOR CREDENTIALING, TECHNICAL AND SOFT SKILLS TRAINING, AND EMPLOYMENT.¹⁴

National employer associations are promoting these leading practices and developing similar initiatives. Examples include the USCCF's TPM movement and the Manufacturing Institute's promotion of industry-recognized, stackable certifications in hiring. ¹⁵ Since 2014, the USCCF has reinvented employer leadership in education and workforce systems. Through the TPM Academy, the USCCF has trained employers and business associations in over 90 communities to organize performance-based talent supply chain solutions with preferred and trusted education and workforce partners. ¹⁶ The Manufacturing Institute has composed an "M-List" of training providers—predominantly community colleges—that recognize programs that incorporate stackable credentials. ¹⁷

At the same time, many talent sourcing and development partners, including universities and colleges, are seeking new connections and partnerships with the business community to address employer needs and expand opportunities for learners. Many of these efforts focus on new types of earn and learn models, including apprenticeships, internships, and individual and group projects and challenges.

Northeastern University, for example, has long organized authentic employer challenges as student capstone projects and as a prerequisite for credentialing. ¹⁸ Another example is Paul Quinn College, in Dallas, which requires students to work 10 to 20 hours a week at jobs that enable them to apply their knowledge and skills consistent with their program of study. ¹⁹

GROWING POLICY DEBATE & CALLS FOR ACTION

At a time of increased scrutiny by federal and state policymakers in the return on investment of postsecondary education and workforce development programs, there is also growing interest in expanding access to earn and learn opportunities. This can be seen in the policy debates surrounding the reauthorization of the Workforce Innovation and Opportunity Act and upcoming reauthorization, of the Carl D. Perkins Career and Technical Education Act and the Higher Education Act. This growing interest can also be seen in policy debates around major federal initiatives to reform existing federal workforce programs, such as the White House initiative to explore a broader approach to apprenticeship in cooperation with employers and their education partners. States are exploring similar legislation and programmatic reforms.

In debates at the federal and state levels, there are increased calls for improved alignment between our nation's education and workforce investments and the needs of employers in a growing, dynamic economy. However, these federal and state legislative and reform initiatives too often are carried out within traditional higher education and workforce development silos that do not provide the flexibility needed to support the full range of employer talent sourcing and development strategies, especially those involving earn and learn models that provide shared value to employers, students, workers, and government.

NOW IS THE TIME TO ACT

In a dynamic economy that will increasingly compete for talent, having in place an education and training system that can produce a skilled and competitive workforce to close the skills gap is vital to our nation's economic growth and success. Only through bold leadership and transformative change will we continue to ensure greater access to opportunity for students and workers and better access to talent for employers.

IT IS TIME TO BREAK DOWN TRADITIONAL SILOS AND **CREATE A NEW VISION FOR OUR NATION'S EDUCATION AND WORKFORCE DEVELOPMENT SYSTEMS,** ONE THAT PROVIDES MORE OPTIONS FOR EMPLOYERS, STUDENTS, AND WORKERS TO ENGAGE IN HIGH-QUALITY EARN AND LEARN OPPORTUNITIES.

Expanding Earn & Learn Pathways

To build stronger connections between employers and their education and workforce development partners—and break down government silos—public and private-sector leaders must work together to design and build new public-private education and workforce systems with stronger earn and learn pathways. These leaders should provide employers with the flexibility to offer a wide variety of high-quality earn and learn programs that best fit their business models and talent sourcing and management strategies and better integrate the over \$1 billion in annual investments made by employers and government in talent development.²⁰

ALIGNMENT WITH EMPLOYER TALENT SOURCING STRATEGIES & QUALITY ASSURANCE SYSTEMS

Any approach for building stronger earn and learn pathways should align with leading employer talent sourcing and development strategies. Employers have a range of choices when it comes to sourcing talent. They can choose to "make" their own workforce by fully investing in the training and development of their workers. While this ensures workers are trained in accordance with the employer's needs, it does carry a significant cost and risk that the employee will leave prior to the employer achieving a return on investment.

Employers can also "buy" their talent by seeking talent on demand that has already been educated, trained, or credentialed. This has the benefit of outsourcing the cost of training to learners and government agencies, but the result is often positions going unfilled for long periods of time and a gap between the skills learned and workforce needs.²¹

What employers need is a third choice, one in which they share the cost and risk of training with learners through earn and learn pathways that combine both "make" and "buy" (see Figure 2).

FIGURE 2

Employer Decision-Making in Talent Sourcing



- Employer pays full cost of training
- Built to employer specifications
- Risk of labor leaving for another company
- Cost of training shifted onto providers and workers
- Results in longer time to fill positions
- Risk of skill misalignment with job requirements
- Employers have skin in the game
- Risk sharing spread among stakeholders
- Improved alignment of training with employer needs

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This new system must provide employers and their partners with an alternative approach to providing quality assurance that should complement existing systems now used in higher education and government-registered apprenticeships.

Colleges and universities can go through a number of accrediting bodies to ensure that they meet professional, financial, and academic standards. Going through a regional or national accrediting agency allows the program to access Title IV student grants and loans under the Higher Education Act.

The public workforce system has other means of recognizing program quality, largely through government-managed recognition and endorsement processes, such as the U.S. Department of Labor's Registered Apprenticeship program and the Workforce Innovation and Opportunity Act eligible provider recognition. Programs that go through these quality assurance systems benefit by being eligible for discretionary workforce grants managed by state and federal agencies.

None of the above systems, however, provide the flexibility employers need to design earn and learn

programs that best meet their needs. A new employer recognition system would provide valuable assurance that programs meet employer workforce needs while ensuring quality for all stakeholders. (See Figure 3).

THREE CORE FEATURES

To provide employers with maximum flexibility in designing and ensuring quality, earn and learn pathways should have three core features:

- 1. Earning While Learning: Employers pay learners wages while they participate in education and training programs; this way, employers have skin in the game from the start. As long as they are in compliance with applicable federal, state, and local employment laws and regulations, employers can pay learners in a variety of ways based on their own talent sourcing, onboarding, and development strategies. They also have the option of providing wage and earnings progressions and other types of financial incentives to encourage learners to complete their programs.
- 2. Integrated Learning & Working: Employers and their partners develop and manage a formal education and training program with defined learning objectives that integrate on-the-job training and workplace applications with related

FIGURE 3

Program Decision-Making in Quality Assurance



- Certifies a college/university meets professional, financial, and academic standards set by its peers
- **Incentive:** Recognition by a regional or national accreditor makes colleges/ universities Title IV eligible
- Programs recognized by the U.S. Department of Labor as meeting occupation-specific standards and other regulations (e.g., safety) and program requirements
- Incentive: Programs eligible for discretionary workforce funds and employers pay wages
- Programs recognized by employers and business and industry associations for being aligned to their workforce needs
- Incentive: Increased private sector investment in training and wages with the opportunity to align public sector investments and other forms of quality assurance

instruction. This core feature encourages employers to formalize existing informal learning and on-the-job training and integrate it with formal classroom, laboratory, or online education and training.

They then have the flexibility to define the focus or scope of their programs and are not required to adhere to a single occupation. Instead, they can define an occupational focus or define broader business functions, occupational families, and career pathways.

Learning is provided by employers and/or their preferred and trusted partners and delivered in the workplace or elsewhere during or outside of work hours. They also have the option to make their programs time or competency-based and have the flexibility to determine how competencies are demonstrated and the length of time the program takes.

3. Transferrable Credentialing of Attained Competencies: Employers and their partners provide opportunities for learners to attain one or more credentials that are portable. These credentials are awarded based on demonstration of learning and the assessment of competencies rather than merely participation in—and completion of—all required learning activities.

Employers and their partners have flexibility in how they assess competencies as long as they adhere to quality criteria and guidelines. They must also ensure that these credentials and related competencies are transferrable. This is accomplished by embedding industry and professional certifications into training programs, awarding college degrees and certificates in cooperation with education partners, arranging college credit transfers with education partners or a national credit recommendation service, and/ or incorporating into the program widely used industry competency frameworks.

Earn and learn pathways are also supported by ensuring all employers provide verification services to other employers and credentialing partners that seek to recognize and use these credentials in providing further employment and education and credentialing opportunities.

LEVERAGING EMPLOYER INVESTMENT TO EXPAND EARN & LEARN PATHWAYS

Any earn and learn pathway should improve how we leverage and integrate employer-financed formal and informal training and tuition assistance and their connections to public investment.²² According to Georgetown University's Center for Education and the Workforce (CEW), U.S. employers spend \$177 billion annually on formal postsecondary education and training and an additional \$413 billion on informal training.

To put these figures in perspective, four-year colleges and universities spend \$347 billion annually on formal higher education and community colleges spend \$60 billion. Certifications, apprenticeships, and other workforce training programs—including federally funded job training—account for an additional \$65 billion annually. In short, employers account for 43% of all spending on formal higher education and training, spending roughly three times as much as community colleges.

This substantial employer spending on formal training comes in two major forms: (1) corporate training and (2) tuition assistance. By far, the largest share—more than 78%—is corporate training provided either inhouse or by contracted training partners.

FORMAL IN-HOUSE TRAINING ACCOUNTS
FOR 46% OF TOTAL EMPLOYER SPENDING.
CONTRACT TRAINING, IN WHICH EMPLOYERS
HIRE OTHER BUSINESSES, EDUCATIONAL
INSTITUTIONS, OR INDIVIDUALS TO PROVIDE
TRAINING SERVICES, ACCOUNTS FOR THE
OTHER 32%. TUITION ASSISTANCE PLANS,
WHICH REIMBURSE EMPLOYEES FOR EXPENSES
THEY INCUR ATTENDING APPROVED COLLEGES
AND PROGRAMS, ACCOUNT FOR 16% OF
FORMAL TRAINING.

Building stronger earn and learn pathways requires employers to formalize on-the-job learning into more structured and supervised learning and improve its integration with formal training. This will provide earn and learn options for more students and workers in all economic sectors and all levels of the workforce.

Currently, employer investment in training is not evenly distributed across all workers. The bulk of formal employer investment, including both corporate training and tuition assistance, goes to employees who already have college degrees. According to CEW, 58% is spent on employees who already have a bachelor's or more advanced degree, 25% on

employees who have some college education, and only 17% on employees who have a high school diploma or less.

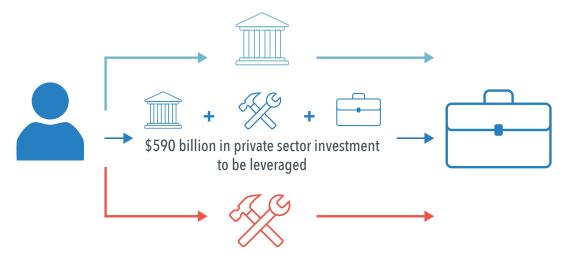
The key to success is unlocking and leveraging employer investment to support a wide variety of earn and learn programs that fit different business models across sectors, including the expansion of paid internships in partnership with universities and colleges. This untapped potential is the key to activating new pathways to opportunity for learners, particularly those learners who are currently not served—or not served well—by traditional education and workforce pathways (see Figure 4).²³

EXPANDING EMPLOYER CHOICE

Employers need more choice when it comes to sourcing talent. Employer leadership and investment needs to be increased when it comes to building their own workforce—referred to here as make—as well as where they source credentialed talent from—or buy. However, the new pathways that need to be better structured and more fully explored is the continuum of earn and learn programs that combine make and buy.

FIGURE 4

New Earn and Learn Pathways



As shown in Figure 5, employers could develop their own earn and learn programs. They could also do this in partnership with other employers or education and training partners, based on a variety of models that involve varying levels of employer investment and management.

Likewise, employers could choose to manage their own programs or participate in programs managed by others. They could finance and deliver their own earn and learn programs or do this with other employers and industry associations with minimal involvement of publicly funded education and training partners, which is sometimes the case in corporate training programs.

They could also choose to participate in earn and learn programs managed by publicly funded education and training partners, which is often the case with university and college internship programs.

ASSURING QUALITY & PROMOTING INNOVATION

Any approach to building stronger earn and learn pathways should give employers the flexibility to design a customized program fully integrated into their overall talent management systems and talent sourcing and development strategies. This requires an employer-led quality assurance approach that provides the widest possible flexibility in how employers and their partners design and manage their earn and learn programs as long as they have effective quality management systems.

Such an employer-led quality assurance system would cover the full continuum of "make," "buy," and "make and buy" spaces in a way that adds value to existing quality assurance processes already in place. The new system could cover currently unrecognized employer-led training programs as well as add an important endorsement to programs covered under existing higher education accreditation or government-registered apprenticeship programs that are seeking stronger alignment to employer workforce needs (see Figure 6).

FIGURE 5

A Continuum of Make and/or Buy Options

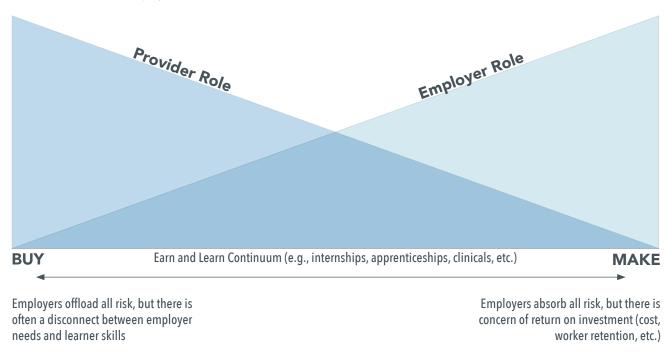
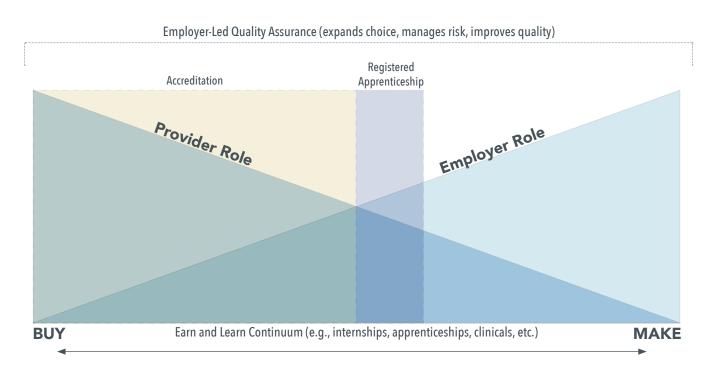


FIGURE 6

An Employer-Led Quality Assurance System for New Earn and Learn Pathways



CENTER FOR EDUCATION AND WORKFORCE 15

An Employer-Led Approach

What follows is a proposed design for a new system that is employer-led, but provides enough structure to assure that any recognized or endorsed earn and learn pathways program is of high quality and meets the needs of today's economy. However, this approach should be further explored and pilot-tested in one or more sectors to determine its feasibility and effectiveness in expanding opportunity and assuring quality. This pilot-testing is addressed in Part IV.

ORGANIZING AN INDUSTRYWIDE COORDINATING COUNCIL

Employers must play a major leadership role in working with their business and industry associations to establish a governing body for promoting and ensuring quality in earn and learn pathways. One option is to establish an industrywide coordinating council or other type of nonprofit organization to do the following:

- Promote employer-led earn and learn pathways
 to move these programs to scale with partners.
 Establish a website with publications and other
 resources to educate the public on earn and learn
 pathways and connect with industry partners.
- Develop and maintain quality assurance standards and requirements based on the core earn and learn features and leading private sector quality assurance standards and practices. Coordinate the customization and extension of these standards and guidelines by industry groups representing different sectors.

- Develop and manage an independent auditing and certification system based on global and national auditing standards and practices as well as the earn and learn quality assurance standards and guidelines. Work with industry groups that have developed customized and extended versions of these standards and guidelines to coordinate auditing systems and prevent inconsistencies and duplication.
- Provide professional development and technical assistance for employers and partners to establish and manage these programs, including internal auditor training in cooperation with industry groups that have issued their own standards and guidelines.
- Provide a forum for employers, business associations, and other stakeholders to collaborate in building and scaling earn and learn programs. This could involve working committees, task forces, or national meetings.

The coordinating council could have a board of directors of employers and business associations but provide memberships to other partners to offer input on the quality assurance system. Partners could include universities, colleges, and other education and training providers; talent sourcing and staffing companies; and federal and state governments.

These partners could play key roles in promoting leading public-private partnership models of earn and learn programs and leveraging the quality assurance system to identify high-quality programs.

LEVERAGING INDUSTRY BEST PRACTICES TO ASSURE QUALITY

The most important responsibility of the industrywide coordinating council is to manage the quality assurance system that establishes standards and auditing systems for the recognition of high-quality earn and learn programs. This approach must allow for customization within and across major industries.

Such a system should be designed based on leading national and global industry practices for quality management systems and supplier certification. One approach to meet these design criteria is to develop quality assurance standards and requirements based on the ISO 9000/9001 quality management system standards and related standards that now address the credentialing of individuals (e.g., ANSI 17024).²⁴ The ISO 9000 guiding principles and ISO 9001 requirements reflect widely shared principles that have been derived from leading business practices over many years (e.g., Baldridge, TQM, and Lean Six Sigma). These principles and requirements provide the basis for quality management system requirements across all industries.

Using this approach for supplier certification, the business community can experiment with employer-led quality assurance that is voluntary, layered, and insulated from conflicts of interest that may arise between—and within—business associations, certification groups, and membership organizations. Based on this approach, an industrywide coordinating council can set quality management standards for earn and learn programs that can then be layered on by organizations and consortia representing industry verticals. This can be done in a synergistic and additive manner that allows different levels of program recognition (e.g., basic to advanced).

Such an approach has many advantages and builds on well-known industry best practices from the private sector.

Key advantages include:

- **Integration With Existing Business Management** and Auditing Systems — Such a quality assurance system could be easily integrated into employer management systems, including talent sourcing and development systems. The ISO 9000 quality management system standards and auditing requirements are designed to be fully integrated with other management system standards (e.g., environmental, health, and safety) for consistent implementation and auditing across all business processes, including human resource management. By using the same principles, terminology, and types of documentation used by employers implementing ISO 9000-based systems, this approach allows an earn and learn quality assurance system to be more easily understood and implemented. It would also enable employers to more easily prepare for both internal and external auditing because the standards and processes would be similar to their existing audits.
- Neutral Approach That Provides Flexibility and Enables Innovation These standards represent a neutral approach that does not dictate how an employer produces a product or service as long as the employer has an effective quality management system in place that ensures customer and stakeholder requirements are met on a consistent basis. This approach allows for major innovations in how earn and learn programs are designed and managed and how employers and partners decide to work together. It provides an employer with flexibility to continuously change and improve internal operations under the same quality management system.
- Layered Approach for Setting Quality
 Standards and Requirements ISO 9000-based system standards have been successfully applied across all industries throughout the world. They have been used by major industry groups as a foundation for customization and

extension to meet specific industry needs. Major industries, such as aerospace, automotive, and telecommunications have developed more specialized and extended quality management system standards based on ISO 9000. They have also developed auditing systems that are coordinated and integrated so that businesses can be certified to one or more standards through a coordinated and cost-effective auditing system that mitigates conflict of interest, reduces duplication, and streamlines reviews.

The coordinating council can develop these standards, with industry groups such as manufacturing, construction, healthcare, and information technology developing extended and more specialized standards. This approach allows for diversity across industries in a way that builds on a foundational set of standards recognized across all participating industries. This system is transparent, showing how all the standards relate to one another and where there are key differences that need to be communicated clearly.

In addition, federal and state governments can add additional layers of standards and requirements for government-recognized earn and learn programs such as apprenticeships, and can leverage the same auditing system to recognize high-quality programs.

Quality Management Systems That Consistently Deliver Results

This ISO 9000-based approach can provide industry recognition based on the demonstrated ability of the earn and learn program to consistently provide learning and credentialing services that meet employer requirements and provide high-quality credentials to workers as evidenced by the following:

 Consistent performance on core metrics such as credential attainment rates, employment and earnings, and related employer return on investment metrics.

- Effective operation of quality management systems according to specified requirements to ensure that programs consistently meet customer, stakeholder, and statutory/regulatory requirements. These requirements could be based on ISO 9000 principles and terminology and include the following:
 - Leadership commitment to meeting requirements and ensuring performance.
 - Design and development of programs to consistently meet requirements like competency, assessment, and credentialing requirements.
 - Operational planning and control of programs to meet requirements, including scope and sequence of learning and assessment, outreach, selection, enrollment, documentation of learner participation, assessment, and credentialing.
 - Relationship management with supplier partners such as talent sourcing partners.
 - Performance measurement, analysis, and continuous improvement.
 - Internal audit and management review.
- Additional performance metrics, quality management system requirements, and other requirements established by industry groups.

INDEPENDENT AUDITING FOR PROGRAM RECOGNITION

An employer-led approach to quality assurance must have an independent auditing system designed to be similar to other quality management auditing systems now used in the private sector. A separate auditing system prevents even the appearance of conflict of interest with business associations and consulting companies that promote and provide technical assistance in developing earn and learn programs.

Using this two-part system, a program can benchmark itself against a chosen industry standard and be certified by an independent auditor for meeting the standard. This necessary firewall ensures that there are no conflicts of interest between stakeholders and it removes the administrative burden of having the organizations that set standards also implement the audit. Such a system would be different from traditional accreditation or government-led recognition programs and would be based on industry best practices.

Figures 7 and 8 illustrate how a variety of earn and learn programs can go through the new employer-led quality assurance system.

In Figure 7, a community college and high school program both commission Auditor A to review their programs against Level 1 quality management standards set by an industrywide coordinating council. In Figure 8, the high school program commissions Auditor B to review its program against Level 2 standards set by an industry-specific organization, in this case manufacturing or construction. In Figure 8, a community-based organization program—Program C—has commissioned Auditor B to review its program against Level 1 and Level 2 standards.

In each example, the programs that are undergoing review are separated from the standards setting organizations by a network, creating a necessary firewall and preventing potential conflict of interest (e.g., companies participating in earn and learn programs are not directly reviewed by the associations that make up the standards setting bodies of which they may be members).

FIGURE 7

Program Recognition in the New ISO 9000-Based Quality Assurance System

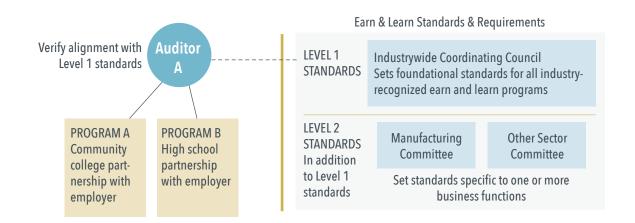


FIGURE 8

Layered Approach to Program Recognition

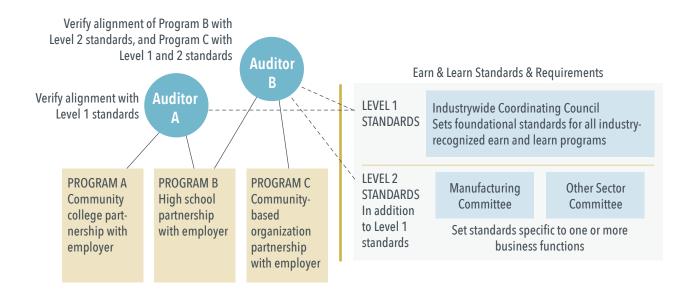
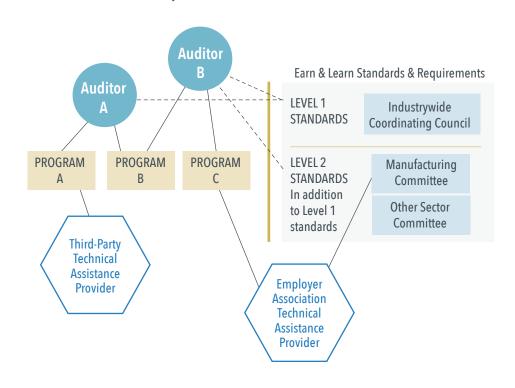


FIGURE 9

Technical Assistance Entities in the New Earn and Learn System



An employer-led quality assurance system based on ISO 9000 practices would not be static. Employers could use their quality management systems to make changes to their learning outcomes and assessment systems based on dynamic and changing needs. They also could use their quality management systems to make continuous improvements in their earn and learn programs according to performance measures.

TECHNICAL ASSISTANCE

Another feature of the new system are technical assistance entities that work directly with programs to help them organize and launch new earn and learn programs or support them in improving existing ones. Technical assistance can be provided through one of two types of entities: (1) third-party organizations or (2) associations that are part of either the industrywide coordinating council or an industry vertical organization (see Figure 9).

Third-party organizations include any education or workforce intermediary—including government agencies—that are interested in providing expertise and services to new or existing earn and learn programs. Types of services could include providing guidance on industry standards, providing professional development, sharing best practices, and assisting with program review, data analysis, and continuous improvement.

Business organizations and associations that are part of the quality standards bodies can also provide technical assistance. This includes industrywide coordinating council or industry vertical organization members. As long as there remains an independent auditing system, these employer organizations can provide direct technical assistance without conflict of interest.

ALIGNING & INTEGRATING WITH FEDERAL & STATE QUALITY ASSURANCE SYSTEMS

Federal and state governments can play a role in promoting the adoption and use of the new quality assurance system by providing funding for its development and pilot testing with leading employers and their partners. Governments have the option of leveraging the new employer-led quality assurance system to reduce auditing redundancy, improve program alignment with employer demand, qualify employers for financial incentives, and count those programs and participants in performance systems (see Figure 10).

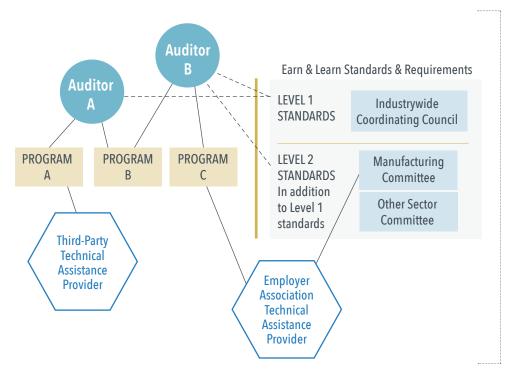
INCENTIVES & MANAGING EMPLOYER INVESTMENT RISK

The creation of stronger earn and learn pathways within the new public-private education system creates better opportunities for employers to address the skills gap and improve the source and development of talent in critical positions. However, the three core features of earn and learn programs and the major design components described earlier also increase the costs and risks of providing high-quality earn and learn opportunities.

Employment and wages create major compensation risks. Employers could lose their investments if workers do not successfully complete the program or if they leave to work for another employer—possibly

FIGURE 10

Alignment with State and Federal Programs and Policy



Federal Government (e.g., U.S. Dept of Labor and U.S. Dept of Education)

State Government (e.g., workforce and education agencies)

- Align funding streams and investments
- Align accreditation, program approval, and eligible provider lists
- Align performance and accountability systems
- Align tax policy and incentives
- Align education and credentialing policy

even a competitor. Credentials, in particular those that address critical and transferrable skills, increase the risks of losing investment to other employers. Finally, quality assurance, consumer and worker protection, and transparency and accountability requirements likely increase administrative costs and regulatory risks.

As a result, significantly expanding the number of employer-led earn and learn pathways may require incentives to offset risks associated with talent development. These three major types of incentives should be explored:

- National recognition for improving talent sourcing and recruiting
- Federal and state financial incentives
- Reduction in government regulatory costs and risks

Improving Talent Sourcing & Recruiting

Provide a mechanism for employers and their partners to utilize their industry recognition to build stronger brands in the talent marketplace and improve their ability to attract and retain the top talent for their most critical jobs. This could be done through strong marketing and promotion of the industry recognition system and how such recognition could be used in talent recruitment efforts, including websites and outreach materials.

Federal & State Incentives

Work with federal and state governments to explore various financial incentive structures to mitigate risk for employers that participate in certified earn and learn programs. Incentives could include federal and state grant programs similar to state customized training programs now operating in many states, as well as federal and state income and payroll

tax incentives and wage subsidies. These financial incentives could be combined with student and worker incentives similar to what is available for those participating in accredited higher education programs, such as student grants and loans that can be used to cover program participation costs and living expenses.

An example of a public sector-led strategy for offsetting employer investment risk is to subsidize the wages of workers in recognized programs until the worker is fully productive in their occupation. This "training wage" allows employers to invest resources into training and wages for less-than-fully productive workers, without absorbing the full cost.²⁵

Another option is for recognized programs to retain a portion of the state income tax for a period of time for learners that have completed their training. ²⁶ This would allow participating employers to recoup all or a portion of the investment they have made in a worker and would incent them to retain and promote the worker faster.

An example of a market-based financing solution is for an employer to bring on an income sharing agreement partner to offset the cost of training for a percentage of worker earnings over time.²⁷ This method offsets the cost of training for employers, but in a way that does not curtail the mobility of workers.

Another way for the public sector to support the development of a new system would be to offset costs associated with building out essential components. For example, federal and state governments can invest in technical assistance entities that help organize and launch programs based on best practices, better positioning them to be recognized under the new system. In addition, federal and state government can help seed the new system and provide a proof of concept by offsetting the cost of programs undergoing their first audit.

Reducing Regulatory Risk & Cost

Work with employers in recognized programs to reduce regulatory cost and risk. Federal and state governments could work with the new employer-led system to build on the general ISO 9000-based standards and guidelines and accredit auditors for addressing more specialized government registration standards and guidelines. This not only reduces inconsistency and redundancy in auditing for employers seeking more than one private sector or government certification, but also reduces regulatory uncertainty and risk for those seeking federal and state incentives.

PROMOTING LEARNING & CREDENTIALING TRANSFER

Under the new system, employers and their partners must provide opportunities to attain one or more transferrable credentials. Currently, most employer-provided training to non degree-holding employees does not result in a credential or college credit. This new public-private system and earn and learn pathway is designed to expand opportunity for more students and workers to earn credentials that can more easily transfer within and between the public and private sectors.

Earn and learn pathways can expand access by offering high-quality and high-value credentials at all levels, recognized by other employers and transferred to traditional college degrees and certificates. Employers would be required to provide assurances that these credentials and related competencies are transferrable to other employers and credentialing opportunities.

This could be done by embedding industry and professional certifications, awarding college degrees and certificates in cooperation with education partners, and arranging college credit transfers with education partners or a national credit recommendation service.²⁸

Examples of types of credentials and transferrable learning that can be embedded in a variety of earn and learn pathways include the following:

- Embedding Industry Certifications —
 Opportunities for participants to earn industry certifications by embedding them into earn and learn programs, similar to what is being promoted by the Manufacturing Institute.
- Providing Degrees and Certificates —
 Opportunities for participants to earn degrees and certificates upon completion of programs or get credit toward degrees and certificates offered by education partners.
- Offering Independent Credit Recommendations

 Engaging national credit recommendation service providers to offer advice on awarding credit toward degrees based on completion of earn and learn programs, similar to what is being done for a variety of corporate and military training programs.
- from industry organizations and other external entities that the competencies and credentials provided through the program offer value to participants in pursuing careers and additional education and credentialing opportunities. This could include employer use of industry competency frameworks that provide a common language for describing job requirements and could provide the basis for education partners to streamline and fast-track prior learning assessments for advanced placement in their degree and certificate programs.

PROMOTING TRANSPARENCY & ACCOUNTABILITY

Employers and their partners should embrace transparency in the talent marketplace by making information about their earn and learn programs widely available to students and workers and all major stakeholders, both to ensure that consumers have the information they need for career planning and for program accountability purposes.

Participating auditors and recognized programs should make information available on their websites and other systems to inform career planning. They should distribute this information directly to their talent sourcing and recruitment partners to ensure this information is fed into their most trusted recruitment channels.

The industrywide coordinating council could work with data management partners and services to organize and maintain a database of all employer-recognized programs, including earn and learn programs, which can be used to monitor the evolution and growth of new pathways to opportunity. The committee should at a minimum require reporting on progress in (1) increasing the number of employers offering high-quality earn and learn opportunities and (2) increasing learner participation in these opportunities and achieving credentials that lead to employment and further education.

Earn and learn program partners, including employers, employer associations, and education and training partners, should fully embrace shared value creation and accountability for results with all their major stakeholders. In particular, they should measure and continuously improve how well they meet the most pressing needs of employers in developing qualified talent for critical jobs.²⁹ They should also measure and continuously improve the value created for students and workers in terms of attained credentials, employment, earnings, and further education. They should have the capacity

to report results to all major investors and funders providing financial incentives, including federal and state governments.

PROVIDING CONSUMER & WORKER PROTECTIONS

Any approach to quality assurance must ensure that all earn and learn programs provide basic rights and protections to participating learners. This starts with consumer protections in which employers and partners clearly specify in writing the obligations, requirements, and rights of participants.

Employers and partners must also take steps to ensure that these protections are followed along with a consumer complaint or appeal process. Furthermore, these programs should clearly specify how students and workers can attain credentials and how these credentials will be issued and verified with other employers and credentialing organizations to ensure credential use and transfer.

Finally, these programs should ensure that they are in compliance with other consumer protection, health, safety, and employment laws and regulations.

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Piloting Solutions & a Call to Action

Creating and scaling new earn and learn pathways within public-private education and workforce systems requires both short- and long-term commitments from employers as well as business and industry associations. In the short-term, first steps include better defining system elements, gaining participation interest from industry associations and employers, and rapidly prototyping and testing these system elements. These first steps should be designed based on the proposed vision and framework promoting industry-specific initiatives that develop and build on a shared quality assurance foundation.

STEP 1

Identify Willing Early Adopters — Employer-led earn and learn pathways must be built through industry-specific initiatives coordinated through leading national business and industry associations. Therefore, interest and commitment from key stakeholders within individual industries will be needed to pilot these efforts. The manufacturing industry led by the National Association of Manufacturers is committed to be the first to begin this process.

STEP 2

Begin Organizing the Industrywide Coordinating Council — Each of the associations managing early adopter industries, along with key national associations such as the U.S. Chamber of Commerce and Business Roundtable, participate in a semi-formal group to define the shared quality assurance standards and systems to be pilot tested through industry-specific initiatives. They will also define how early adopter industries can share lessons learned and best practices and work together to continuously improve the shared quality assurance foundation. The U.S. Chamber of Commerce is committed to assist in establishing this committee in cooperation with the National Association of Manufacturers and other business associations.

STEP 3

Develop Models for Pilot Testing — Early adopter industries then define the additional industry-specific elements of quality assurance to be pilot tested as well as how technical assistance and recognition will be managed and tested. The initial expectations and supports should be put in place to enable pilot testing in select locations.

STEP 4

Engage First Adopter Companies and States in Pilot Testing — Make revisions as necessary to improve the cost-effectiveness of the system and reduce barriers to employer participation across multiple industries.

STEP 5

Develop and Test Federal and State Incentives —

Incentives should be developed by both federal and state governments to promote employer participation in earn and learn pathways. This mix of incentives can then be evaluated during this pilot period to determine which is most effective in expanding participation.

As these activities occur across multiple industries and multiple states, there are additional steps that should be taken for the long-term sustainability and success of an employer-led earn and learn system.

STEP 6

Identify and Harmonize Development of Common and Shared Standards — As the common and industry-specific elements of earn and learn programs begin to take shape, participating industry associations should review and revise common and shared elements. The expectation is that these become the foundation for national earn and learn program standards that all industries can build from.

STEP 7

Align and Coordinate Resources to Achieve Economies of Scale — As common requirements across industries are discovered, the leading associations can seek common solutions and platforms for these requirements that help promote integration and achieve cost savings.

Many of these elements have already begun or are under consideration. This paper provides industries and industry associations with a vision and framework for how to coordinate and promote those activities in support of a larger, more sustainable earn and learn system.

A CALL TO ACTION

America is in need of a new pathway to opportunity, one where employers, government, and learners share in the risk of talent development. Our current education and training systems are struggling to align with the changing workforce development needs of the economy, and there is a need for expanded leadership and investment from the business community.

WE NEED A NEW APPROACH THAT WILL CREATE SHARED VALUE AND MORE EFFECTIVE PATHWAYS TO FMPI OYMENT. **NOW IS THE TIME TO ACT.**

A wide variety of earn and learn innovations are setting the stage for more employer-led solutions. However, success will be determined by increases in employer leadership and investment in education and workforce systems.

This paper outlines an employer-led approach and provides an alternative vision for how to manage quality assurance for programs that seek alignment with employer workforce needs. This new employer-led quality assurance system can more effectively signal—and update—the standards and requirements that need to be met for a program to be recognized or endorsed by the business community. Such a system can be applied to a wide variety of earn and learn opportunities that make up the "make and buy" continuum.

More than a vision, this paper provides a road map for incorporating stronger earn and learn pathways into new public-private education and workforce systems. Now is the time for the business community to work in partnership with philanthropic organizations, states, and other major stakeholders to develop and pilot this new approach. To learn more, contact Jason A. Tyszko, executive director of the U.S. Chamber of Commerce Foundation's Center for Education and Workforce, at jtyszko@uschamber. com, or Gardner A. Carrick, vice president at the National Association of Manufacturer's Manufacturing Institute, at gcarrick@nam.org.

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Acknowledgements & Endnotes

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