



U.S. Chamber of Commerce
Foundation

Coordination Through Quality Assurance

An Employer-Driven Quality Standard
for Career-Building Education

March 2023



Foreword

Changing established practices is difficult, even when most agree that the change is needed. As we write this, early in 2023, it seems that the world has woken up to the need for more coordination between education and employment. There are outstanding efforts to promote skills-based hiring, develop outcomes-based quality assurance for education and training partners, and create the infrastructure to support these mechanisms.

These efforts, as well as alternative quality assurance—the subject matter of this report—cannot succeed without the tireless and often voluntary work of countless individuals who are willing to push against the current status quo and take on the hard task of effecting change. But if we manage even a small shift in the way employers hire, the way educators think about their mission, and the way learners think about their opportunities, the impact will be immeasurable. Millions of Americans will go about their learning and employment journey rightly believing that their preferred pathways will result in employment and increased earnings opportunities.

We thank the members of the Talent Finance Innovation Network—and other stakeholders—who participated in the Talent Finance Quality Assurance Workgroup. They have given their time, energy, and thoughtfulness to help us move this conversation forward. We thank the funders who have made the Talent Finance initiative possible and Walmart in particular, which supported the activities of this workgroup.

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Introduction: The State of Quality Assurance in Education

We began 2022 with one of the worst talent shortages in recent history¹ leading to the highest increase in annual raises and starting salaries in a decade, according to a Conference Board report.² As inflation set in, this was followed by extreme uncertainty, layoffs, and rescinded job offers. According to the Manpower Group, we started to see a substantial increase in reported talent shortages in 2018 with 45% of companies reporting significant talent shortages compared to 40% in 2016. That number rose even faster in 2019 (pre-pandemic) to 54% and has since increased to 75%.³ And there is reason to expect that such constant change will become a persistent feature of the worldwide job market in the future.

In this environment, coordination between postsecondary educators and employers is more important than ever. Unfortunately, this type of coordination has not been a notable characteristic of the U.S. education infrastructure. According to a poll⁴ conducted annually by the American Association of Colleges and Universities, only two-thirds of employers have either “a great deal” or “quite a lot” of confidence in higher education. The Strada-Gallup Employer Survey reveals a lack of confidence in being able to identify qualified candidates.⁵

A highly functioning education infrastructure would have variety and continuous innovation in education models, talent finance, and employer intersection with training. Our current system is too heavily dependent on one funding model—Title IV funds and Federal Student Aid—and an educational model that does not highly emphasize the importance of strong connections between education and employment.

While there are some high-profile examples⁶ of fruitful partnerships between postsecondary educators and employers, we lack a mechanism to systematize the information flow and coordination between these two essential parts of our workforce infrastructure.⁷ The U.S. Chamber of Commerce Foundation’s Talent Finance initiative has highlighted the limitations of this model and the need to have a more comprehensive approach that can better leverage employer financing as well as other government and private sector funding sources. Talent Finance can also expand access to alternative pathways (e.g., apprenticeships) and education, training, and credentialing providers.

To play this role, the Chamber Foundation has taken lessons from the supply chain management sector and proposed a new quality assurance framework. Inspired by, but not strictly modeled on, the International Standards of Operation (ISO) Quality Management System guideline⁸, the Chamber Foundation’s vision is one where employers play a more active role in defining quality in higher education and, in so doing, creating the information and incentives necessary to foster essential coordination between educators and employers.

An Employer-Driven Standard

The postsecondary education landscape in the United States includes institutions with many different missions. There are (1) degree-granting institutions providing two-year or four-year degrees with missions to provide a broad general education along with specific training in a major subject area; (2) career and technical institutions that offer direct occupational training in one of several fields; and (3) institutions specializing in training for a particular field. Across these institutions some programs grant a degree, while others offer a certificate but no degree, as well as certificates that can be “stacked” to create a degree. There are also on-the-job training programs, apprenticeships, and upskilling and reskilling programs administered by employers to employees with the intention of improving performance in their current job or qualifying them for their next job.

Learners and employers navigating this diverse set of opportunities rely on explicit and implicit quality signals such as accreditation⁹, public rankings, and degree levels to make decisions about educational investments and candidate capabilities. The widespread use of these quality signals creates incentives that influence the behavior of institutions and training providers.

These incentives can work for the good of students. When, for example, the National Advisory Committee on Institutional Quality and Integrity (NACIQI), the body that provides recommendations regarding accrediting agencies to the U.S. Department of Education, asked accreditors to focus on graduation rates, institutions worked quickly to identify students who are not making academic progress, which reduces the chance that a student will incur large amounts of debt without earning a degree.¹⁰

However, these incentives can also be harmful. A single-minded focus on the U.S. News and World Report Rankings of higher education institutions, for instance, has led to questionable practices among several universities in recent years¹¹ along with a reassessment by many of the Rankings’ reliability as a measure of quality.

No matter how well or poorly the current quality signals are working in particular instances, one fact is undeniable: the current indicators of quality in postsecondary education were not designed by employers or for the purpose of aligning the incentives of the educator with the workforce needs of students or employers. This lack of attention to the workforce implications of institutional action has led to a predictable divergence in educational reality and workforce expectations. Employer-driven quality assurance fills this gap by creating a systemic mechanism for aligning the incentives of educators with the workforce needs of learners and employers.

Opportunities for Coordination

Learner Preparation

Surveys investigating the coordination between employers and educators reveal a consistent pattern of employers and learners who believe that they leave programs underprepared for workforce success.¹²

Mismatch Between Educational Fields and Job Openings

The persistent mismatch between the number of graduates and the number of job openings in many fields could be resolved with better communication and coordination between employers and educators.¹³

Employment Pathways

Employers interested in diversifying their workforce can use partnerships with educators to create more accessible employment opportunities for learners from diverse backgrounds.

Coordination requires a heavy workload for both educators and employers. Ensuring that learners are prepared for success in their chosen field requires constant updating of curriculum not only to teach specific technical skills but also to provide the foundation for continued learning on the job. It requires sourcing of tools and technologies used across different industries. Aligning the number of graduates in particular programs with job openings requires program planning, advising, and recruiting that has simply not been a part of traditional institutional functions. Finally, creating employment pathways that enable qualified graduates to find an employment match requires building and updating relationships with employers. A well-designed quality assurance mechanism could create the incentives necessary for this work.

For a quality assurance framework to create an incentive for coordination and information flow between employers and educators, standards criteria must generate the information employers need to make decisions about potential education partners. Changing the Debate on Quality Assurance identifies three elements that are essential for an effective workforce-focused quality assurance framework¹⁴:

1. A focus on quality management processes;
2. Responsiveness to diverse employer needs; and
3. Employer validation and recognition of educators that meet standards.

Quality Management

Many in industry are familiar with how the ISO standards address quality management. Adopting quality management in the context of postsecondary education requires a focus on both outcomes and the policies and practices that produce these outcomes consistently over time.

Responsiveness to Diverse Employer Needs

Employers' needs for postsecondary education and training vary widely across industries, within companies, and across time. For a quality assurance system to create the type of coordination that fosters a healthy education ecosystem, the standards must be built on process and outcomes so that educators are rewarded for responding to different workforce needs. This is in contrast to many accreditation systems that mandate specific curricular and process inputs but do not often require programs to meet outcomes benchmarks.

Employer Validation and Recognition

It is difficult and costly to build and maintain a curriculum that is responsive to diverse and changing workforce needs alongside a quality management system that ensures each graduate has the skill attainment necessary for workforce success. Educators will only undertake this work if employers are willing to base investments, hiring decisions, and partnerships on participation in the standard.

An employer-driven standard not only provides a mechanism for coordination but also creates the opportunity for a robust system that separates the auditing of the standard from the standard-setting process. This separation unlocks many unique benefits, including the removal of any perceived or real conflict of interest between standard-setting and auditing.

Talent Finance

An Employer-Driven Quality Assurance Standard is an essential element of the type of education-employment ecosystem that inspired the creation of the Chamber Foundation's Talent Finance initiative.¹⁵ Talent Finance, launched by the Chamber Foundation in 2020, brings together public and private stakeholders to reimagine how best to finance education, training, and credentialing. It also zooms in on how we manage downside risk, such as income and employment volatility.

This work includes, but is not limited to:

- Exploring new ways to invest in people and skills that keep pace with innovation, and advance economic opportunity, diversity, inclusion, and competitiveness;
- Encouraging innovation in private financial instruments for talent development;
- Exploring the role of employer education benefits in reskilling, upskilling, and outskilling current employees; and
- Educational partner quality assurance.

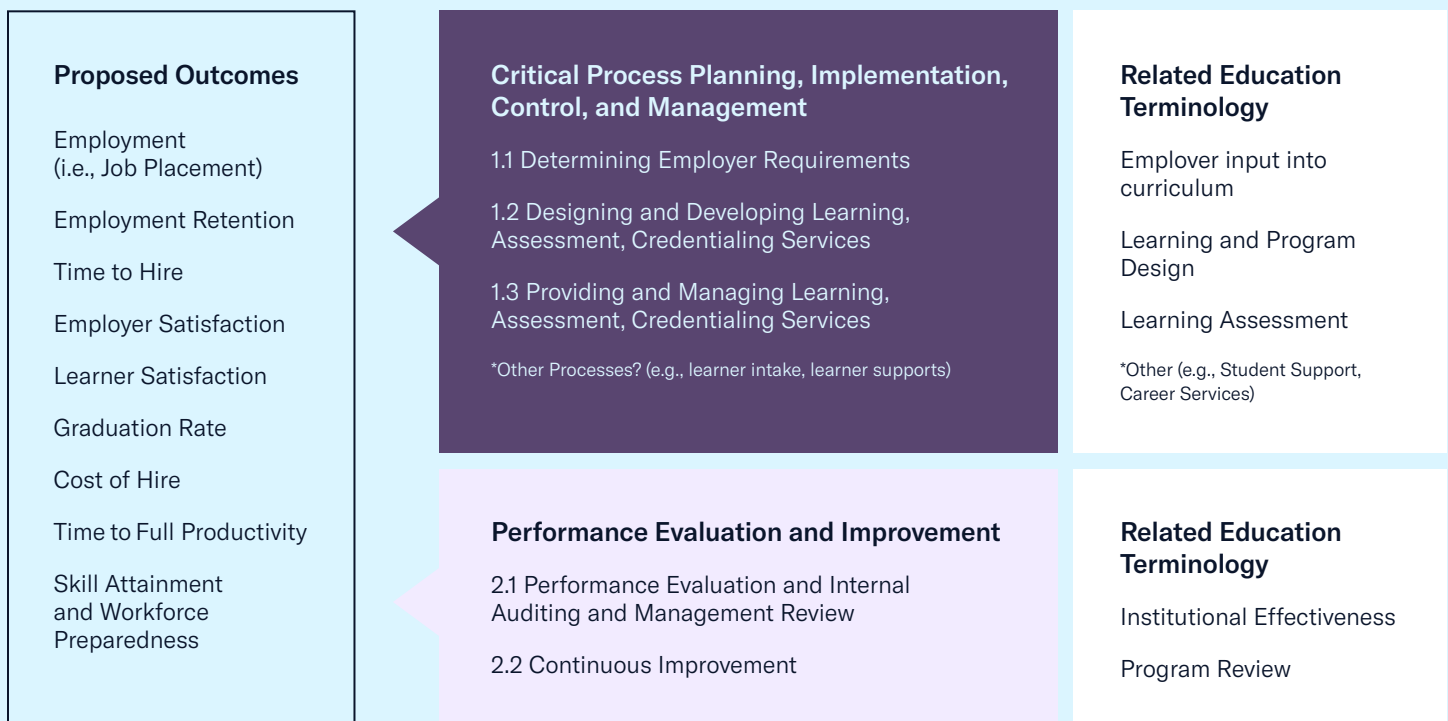
A quality assurance system that is built on an employer standard of quality is a missing signal in today's talent marketplace. Such a signal can provide the necessary assurance needed to finance and expand access to both traditional and alternative pathways and a broader array of education, training and credentialing providers. A more direct link between employers and educational providers has benefits for all stakeholders.

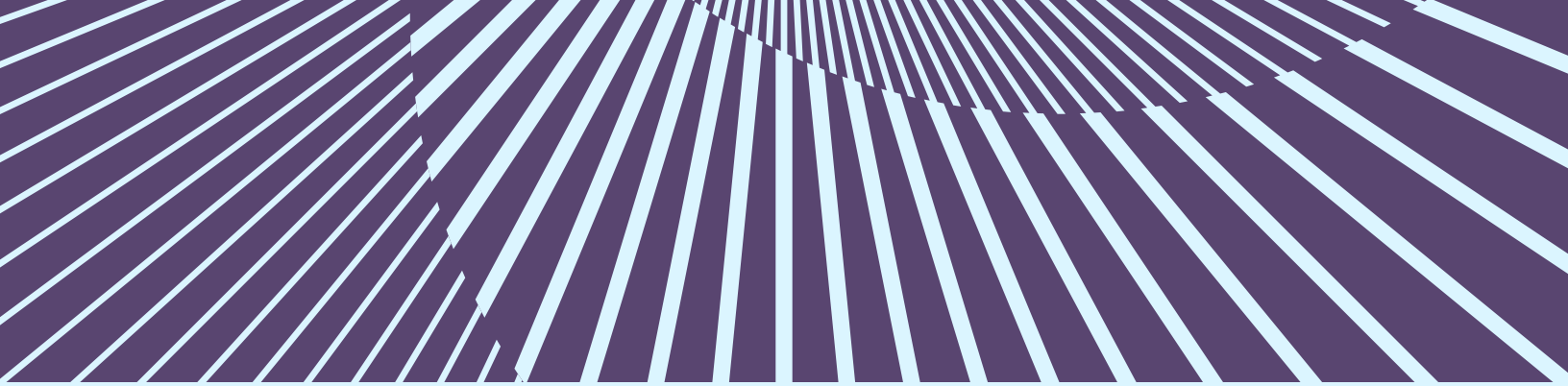
- **Workers and Learners** benefit when they can make educational investment decisions based on better information about the likelihood that program participation leads to the desired employment.
- **Education and Workforce Partners** benefit when they are ensured that programs are aligned with their needs, giving them a justification for allocating resources to the workforce success of students.
- **Employers** benefit when they can make more effective hiring and partnership decisions based on information about the quality of academic programs that goes beyond degree level or type.

Framework

To meet the needs outlined above, we propose an educational partner quality standard framework. The Framework requires the identification of Key Outcomes, Contributing Processes, and Evidentiary Standards, for the given quality assurance level.

Draft Quality Assurance Framework





Key Outcomes

Outcomes are the foundation of employer-driven quality assurance. To avoid unnecessarily inhibiting innovation by creating overly prescriptive standards for important processes, the Employer Partner Quality Framework ties all standards back to the outcomes that ultimately determine a successful partnership between educator and employer. Outcomes should be:

- Connected to the ultimate aims of employers and student workforce success;
- Measurable with available data; and
- Independent of the program being measured.

By anchoring outcomes to the ultimate aims of employers and students and ensuring that they are measured independently of the programs themselves, we reduce the tendency to skew outcomes measurement.

Contributing Processes

While outcomes are the North Star for educator partners, there is often a long time lag between collection of key outcome metrics and important operational decisions. To account for this lag, the framework recognizes the primary processes that contribute to the meeting of outcomes goals. Processes allow us to identify barriers to outcomes goals before it is too late to change course and create information for educators about how their processes are contributing to outcomes. Processes included in the standard should:

- Directly contribute to key outcome measures;
- Produce outputs that are measurable on short and medium timelines.

These processes should be specified in ways that emphasize the design, development and management of critical value-adding processes without constraining innovation and incentivizing providers to follow the same, relatively unsuccessful model we see in traditional accreditation.

Evidence

The standard is brought together by well-designed metrics and standards for evidence so that the evaluation of processes contributes to our understanding of and ability to accurately forecast performance on outcomes. Effective evidentiary standards will:

- Tie processes to the relevant outcome metrics;
- Mitigate or eliminate potential bias in the methodology used.

The framework is designed to accommodate evaluation of educational and training programs of all types, fields of study, and geographic locations. For instance, it is equally relevant for a two-year Associate's Degree in Information Technology that trains people to work for a national technology employer and for a local workforce development board looking for short-term training programs to ease a shortage of medical assistants.

Chosen outcomes are applicable to all fields of study and types of education and training partners, including those that partner together, such as a program of study delivered across several providers. Processes are formulated to leave the "how" of completing the essential tasks to the education provider, focusing instead on results. This flexibility is essential to encouraging innovation and diversity of offerings, and it provides a standardized level of confidence in the results of a particular training program.

Requirements for a Base-Level Standard

While the framework outlined above can accommodate many different standards of varying specificity, a baseline standard clearly defines the outcomes, processes, and evidence that more specific standards will build on. As part of our work in the Fall of 2022, the Chamber of Commerce Foundation brought together the Talent Finance Quality Assurance Workgroup, a group of employers, educators, and workforce development stakeholders, to explore the requirements for a base-level, employer-driven quality management standard. The group identified a set of outcomes that would ensure alignment between employers and educators.

Outcomes

The outcomes identified here are intended to be relevant for any educational or training program with a goal of preparing learners for employment in a particular field.

Employment (i.e., Job Placement)

Employment Retention

Employer Satisfaction



Time to Hire

Cost of Hire

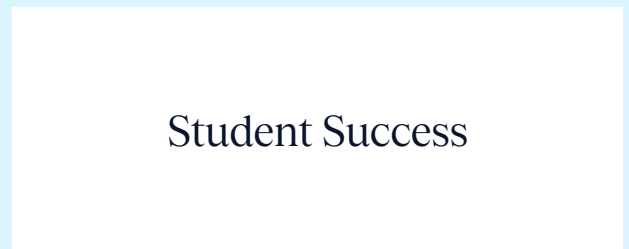
Time to Full Productivity



Skill Attainment and Workforce Preparedness

Learner Satisfaction

Graduation Rate





These outcomes broadly align with the ideal defined above:

01

Connected to the Ultimate Aims of Employers and Students

By tying the evaluation of programs to workforce outcomes (Employment, Employment Retention, and Employer Satisfaction), employer productivity measures (Time to Hire, Cost of Hire, and Time to Full Productivity), and student success measures (Skill Attainment and Workforce Preparedness, Learner Satisfaction, and Graduation Rate) we ensure that educators are rewarded for the success of their students and their employer partners.

02

Measurable with Available Data

While the data necessary to measure each of these outcomes is available in different places, no one has, yet, brought it together in a manner that would allow for consistent use. Information about student workforce success resides in state and federal repositories, employer productivity measures remain housed in employer data stores (if they are consistently measured at all), and educators possess data about student success measures. Ensuring better earnings and employment data through programs such as the U.S. Chamber of Commerce Foundation's Jobs and Employment Data Exchange (JEDx)¹⁶, more consistent measurement of student success data¹⁷, and employer participation is essential to the employer-driven quality assurance project.

03

Independent from the Program Being Measured

Most, but not all of the outcomes listed above are measured outside the program and are therefore independent of the program being measured. Several of the outcomes currently measured internally by programs (Skill Attainment, and Learner Satisfaction) could be measured by an independent body.

As shown in Table 1, a Base-Level Standard will also establish related metrics, calculation methodology, and evidentiary standards for each of the measurable outcomes. Metrics should be specific to time frame, definition of terms, and they should also be defined so their calculation does not unintentionally disadvantage training programs that work with underserved communities.

Table 1: Base-Level Outcomes

Outcomes	Example Metrics
Employment	% Employed within one year
Employment Retention	% Still employed at three months after in-field placement
Employer Satisfaction	Net Promoter Score from Employer Partners
Learner Satisfaction	Net Promoter Score from Learners
Graduation	Graduation Rate/Number
Cost of Hire	Cost of search + lost productivity
Time to Full Productivity	Calendar days assigned for internal training
Skill Attainment	% Mastery of key competencies



Contributing Processes

Contributing processes provide the connection between the educational operations and student workforce outcomes. As shown in Table 2, potential contributing processes should outline those processes that establish reliable outcomes targets without inhibiting innovation.

This process component of the framework draws in part on the ISO 9001 Quality Management System standard for the performance and improvement of critical value-adding processes.¹⁸

Table 2: Examples of Contributing Processes and Performance Management and Improvement¹⁹

- 1. Critical Process Planning, Implementation, Control and Management:** The organization shall plan, implement, control, and manage the risks and improvement opportunities of the processes that are critical in determining and meeting employer requirements and applicable legal and regulatory requirements and achieving the performance objectives of the organization. More specifically, it urges organizations to:
 - 1.1 Determine Employer Requirements** and continuously update employer competency and assessment requirements, related credentialing, documentation, post-hiring service requirements, and applicable legal and regulatory requirements.
 - 1.2 Design and Develop Learning, Assessment and Credentialing Services.** The goal is the creation of cost-effective learning, assessment, and credentialing services capable of meeting employer requirements (defined in 2.1). This includes the required process stages and inputs, activities, outputs, interfaces, and responsibilities; process controls and performance metrics and the identification, monitoring and management of risks and opportunities.
 - 1.3 Provide and Manage Learning, Assessment, Credentialing Services** that are based on process plans and requirements (developed in 2.2), including process controls and performance metrics and how risks and opportunities are managed to consistently meet customer requirements.
 - 1.4 Carry Out Other Processes** (such as learner intake, learner supports)

- 2. Performance Evaluation and Improvement:** The organization shall systematically analyze and evaluate performance in meeting employer requirements. It will use this analysis to determine and select opportunities for improvement and implement any necessary actions to meet employer requirements. Also, it aims to improve overall organizational performance including process performance. More specifically, the organization shall:
 - 2.1 Conduct Performance Evaluation and Internal Auditing and Management Review** based on measures of bottom-line performance in meeting employer requirements. It shall also conduct ongoing analysis and evaluation of both bottom-line and internal process performance and internal audits and management reviews to ensure the organization is meeting employer requirements and capable of meeting these requirements in the future.
 - 2.2 Strive for Continuous Improvement** by identifying improvement opportunities and conducting continuous improvement activities based on proven improvement approaches and methods.

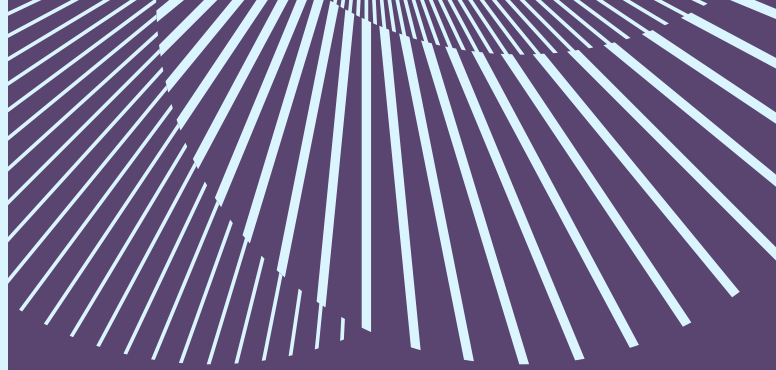
Outputs

Identifying specific outputs related to each process allows programs to develop leading indicators of program performance. Output targets should focus on the successful implementation of critical processes, providing information about where programs may not be meeting goals early enough to adapt and ensure outcome success. As shown in Table 3, effective outputs are measurable, are the direct result of critical processes, and are leading indicators of outcomes.

Table 3: Example Critical Processes and Outputs

Process	Example Outputs
1. Critical Process Planning, Implementation, Control and Management	
1.1 Determining Employer Requirements	Employer requirements document validated employer skill requirements including assessment requirements.
1.2 Designing and Developing Learning, Assessment and Credentialing Services	Program design documents including learning objectives and assessments mapped to employer requirements and related learning products and services.
1.3 Providing and Managing Learning, Assessment, Credentialing Services	Provision of services and related documentation on who received what services with which results (used for monitoring and control of process performance), including skill attainment and credentialing linked to outcome measures.
2. Performance Evaluation and Improvement:	
2.1 Performance Evaluation and Internal Auditing and Management Review	Reports on performance relative to performance goals and reports from internal auditing and management reviews.
2.2 Continuous Improvement	Continuous improvement actions and related documentation.





A base-level standard identifies the outcomes, types of processes, and types of evidence that can be used for all types of education and training programs and partners. More specific standards identifying detailed process requirements and output targets for training partners in particular industries, fields of study, educational modes, or even particular employers then be created to align to the base-line standard, allowing for an adaptable, employer-driven, quality assurance for all educational offerings.

Roadmap for Future Work

The creation of an employer-driven quality assurance standard for education providers can align incentives between educators and employers and open new career pathways for learners. In this report, we have provided a framework for how to develop a standard that is inspired by, but not directly modeled on, the ISO Quality Management Standard.

The framework presented here is built on the identification of outcomes, processes, and evidentiary standards that apply to all types of education and training partners, fields of study, and learning formats. A base-level standard will create generalized outcomes, categories of processes, base-level evidentiary standards for all program types. Additional standards for more specific educational and training programs can be built “on top” of these general standards. For example, online programs could reasonably be expected to have different processes for assuring student learning than in-person programs, or an industry specific standard could have more targeted benchmarks for key outcomes.

Future work will be to:

- **Complete** a base-level standard applicable to all program types;
- **Design and implement** a minimum viable product pilot program;
- **Establish** governance to manage and develop the standard.

Our work has established a shared understanding of how an Employer-Driven Quality Assurance Standard can affect the education-employment ecosystem and create a framework for a standard that will align incentives of educators and employers.

Future efforts to build on this work have the potential to transform the way that learners, employers, and community stakeholders experience education and workforce opportunities and how they access the financing needed to pursue them.

End Notes

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6. Programs like the apprenticeship programs run by the Federation for Advanced Manufacturing Education chapters in Kentucky, Texas, and across the U.S., show a strong potential for employer consortiums to work with educators on opening employment pathways.
7. The U.S. Chamber of Commerce Foundation's Talent Pipeline Management (TPM) process enables employers to create talent development and pipeline management strategies that connect what's happening in education and training programs to the workforce needs of particular employers in a specific local or regional area. For more on TPM see <https://www.uschamberfoundation.org/talent-pipeline-management>.
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