

WORKFORCE IMPACT ASSESSMENT FRAMEWORK: **Non-Degree Training and Programs**

*Training and professional development opportunities designed
to recruit new workers and upskill current workers*



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ABOUT THE FRAMEWORK

To help meet the growing workforce needs of the biopharmaceutical manufacturing industry, the National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL) is developing a **suite of tools to standardize how the community can:**

- Evaluate feasibility of proposed workforce initiatives and programs
- Maximize and communicate the impact of existing workforce initiatives
- Facilitate program benchmarking and comparison through standardized metrics



Framework

Outlines activities, considerations, and measures that define industry-informed best practices for initiative development and sustainability

Comprehensive guidance by initiative type; covers all phases



Self-Assessment

Web-based assessment to help organizations identify initiative strengths and areas for enhancement

Offers a more tailored view of the framework, customized to initiative type and phase



NIIMBL Endorsement Program

ANTICIPATED 2027

Recognizes workforce initiatives aligned with the specific needs of the biopharmaceutical manufacturing industry

Grounded in the guidance and measures in the framework

These tools are customized for **three different types of initiatives:**

1. **Community Outreach and Awareness:** Initiatives focused on creating interest in and understanding of biomanufacturing career opportunities
2. **Non-Degree Training and Programs:** Training and professional development opportunities designed to recruit new workers and upskill current workers
3. **Industry-Aligned Degree Programs:** Post-secondary education that builds specialized knowledge and expertise in biomanufacturing

Impact of the Framework: Efficiency, Consistency, Effectiveness

The framework offers education and workforce development (EWD) providers the opportunity to leverage **industry-aligned best practices for developing or improving initiatives** and **standard methods for assessing and communicating initiative impact**, yielding **successful initiatives that better meet industry needs**.

While NIIMBL has developed the framework oriented around the biopharmaceutical manufacturing industry, its principles and guidance are **transferable to all advanced manufacturing sectors**.

How the Framework Was Developed

Spurred by an interactive 2024 NIIMBL National Meeting session and with support from the Gates Foundation, the NIIMBL team engaged Nexight Group to help develop the workforce impact assessment framework.

Key Stakeholder Engagement

The development process was informed by active engagement of the broader biopharmaceutical manufacturing ecosystem, including:

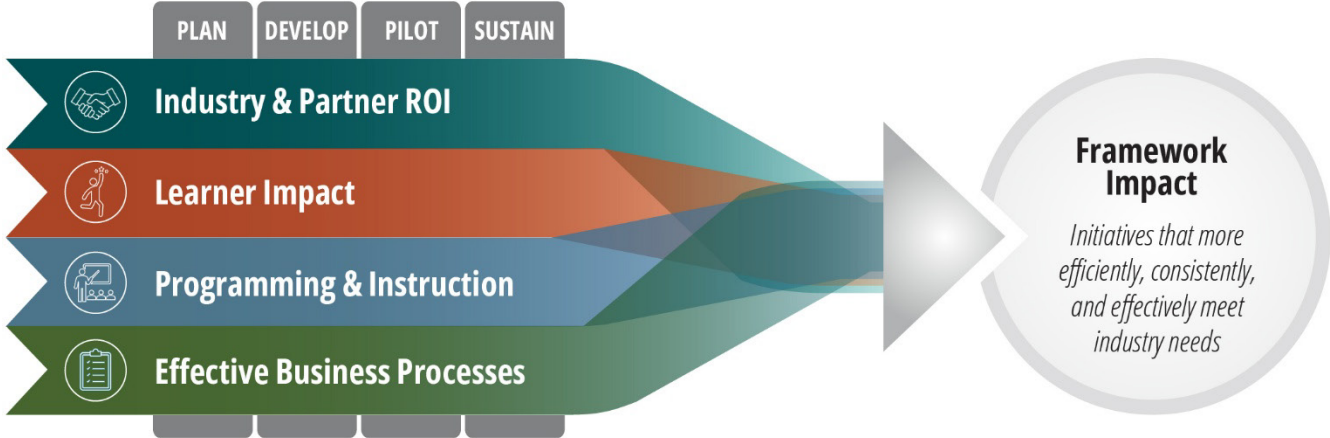
- **Industry:** Small, medium, or large biopharmaceutical manufacturers and suppliers
- **Training Providers:** Training centers, community colleges, universities
- **Economic Development Organizations:** Local, state, or federal governments; non-profits and community organizations; regional economic development organizations

After conducting a comprehensive landscape assessment and literature review of existing program assessment resources, best practices, and guidelines, the team began the development of the proposed framework, soliciting key stakeholder inputs through:

- **March 2025:** Reviews of the framework concept and key components with members of the NIIMBL Workforce Activities Committee (WAC) and a brainstorming session with participants at the 2025 Biopharma Workforce Partnership Conference
- **May – June 2025:** A series of interviews with training providers, industry, and regional economic development organizations to understand current biopharma workforce program benchmarking/evaluation practices and how the framework could support their work
- **June 2025:** A feedback session at the 2025 NIIMBL National Meeting in which more than 40 participants had an opportunity to provide direct input on the guidance and best practices in the framework, with a focus on non-degree training and programs
- **June – September 2025:** Small focus group working sessions to validate and refine activities and corresponding guidance, evaluation markers, and evidence of anticipated impact, as well as help define baseline evaluation criteria and key indicators of exemplary programs
- **October – January 2026:** Review cycles with focus groups to identify areas that needed to be refined or clarified
- **December 2025 – June 2026:** Development of online self-assessment to tailor the framework content to the initiative type and phase of an individual user

UNDERSTANDING THE FRAMEWORK STRUCTURE

Both new and experienced EWD professionals can use the suite of framework tools to identify initiative strengths and potential areas to focus on to continuously improve and communicate initiative impact. This framework should be used as a roadmap to help better **plan, develop, pilot, and sustain EWD initiatives** by considering the perspectives and needs of all stakeholders integral to the success of these initiatives.



Initiative Development Phases

Key phases for developing an initiative, from initiation through implementation and long-term sustainment:

PLAN	Define initiative scope, considering priority industry needs, target learners, instructional methodology, and resource requirements
DEVELOP	Validate and refine initiative value to industry and learners, develop curriculum, and define implementation plan
PILOT	Launch initiative on a small scale to evaluate its success and develop an operational plan to sustain it
SUSTAIN	Continuously evaluate and improve initiative to maximize its impact <ul style="list-style-type: none"> • Sustain an initiative: Continue to follow the business and operational model with new cohorts • Grow an initiative: Increase learner enrollment and/or initiative frequency at the same location/region • Scale an initiative: Replicate the initiative for new geographies and/or new target audiences

Foundational Dimensions of Impact

Key categories of activities that cut across initiative development phases and involve engagement with key stakeholders critical to the successful development and implementation of workforce initiatives:

Industry & Partner ROI	Align initiative with current and/or projected workforce needs
Learner Impact	Enhance learner skill marketability and career opportunities
Programming & Instruction	Apply best practices to optimize initiative delivery and instructional effectiveness
Effective Business Processes	Support initiative success through sound operational planning and practices

Components for Improving Initiatives

Each foundational dimension of impact includes tables with the following content:

Activities	<p>Key elements and/or actions needed to plan and implement an impactful workforce initiative.</p> <p><i>Note: Activities are recommended at each dimension of impact but are not intended to be completed sequentially.</i></p>
Considerations and Guidance	Best practices and steps related to the activity that can set the initiative up for success
Assessment Criteria and Measures	Each activity includes both baseline (minimum achievement) and exemplary (exceptional achievement) measures. These measures form the basis of the rating system in the self-assessment.

Note: Depending on initiative scope, some activities, considerations and guidance, and/or measures may not be relevant.

Example Measures: Non-Degree Training and Programs

The table below provides an **overview of the kinds of measures used in the framework**, across all dimensions of impact.

	ENGAGEMENT EXAMPLE MEASURES	VALUE/IMPACT EXAMPLE MEASURES
INDUSTRY & PARTNERS	<p>In-kind industry support: subject matter expertise; contributions to initiative delivery, instruction, marketing, and outreach</p> <p>Committed resources beyond time: funding, facilities and equipment, enrollment and hiring commitments</p>	<p>Talent attraction and retention: reduction in unfilled positions or time to fill, more qualified candidates</p> <p>Improved employee performance: increased skill and performance, reduced time to promotion</p> <p>Internal resource efficiency: reduced employee time to contribution, reduced need for internal training</p>
LEARNERS	<p>Interest and activation: registration and enrollment numbers</p> <p>Progress and persistence: participant completion rates, drop-off points, time to complete initiative, frequency or duration of engagement</p>	<p>All participants: skill marketability, earnings growth, career pathways</p> <p>Job seekers: access to job opportunities and higher-quality jobs</p> <p>Current employees: job performance and satisfaction, promotion opportunities</p>
TRAINING PROVIDERS	<p>Reach: actual enrollment compared with targets</p> <p>Effectiveness: demonstration that curriculum is engaging, informed, and well-structured</p>	<p>Industry and partner value: committed resources and consistent participation; alignment with industry knowledge, skills and abilities (KSAs) and occupations</p> <p>Business value: revenue and profitability, credibility and track record of initiative, alignment with policy and economic development strategies</p>

USING THE FRAMEWORK

How to Evaluate Initiative Impact

The framework provides **example measures** across phases that capture the value proposition and assess the impact from the perspective of key stakeholder audiences. As you review the framework, **note the following.**

Guidance and measures should not be viewed as a checklist.

- The information provided in the framework—and the accompanying self-assessment tool—should be used as guidance to **inform continuous improvement** and help increase initiative impact. The self-assessment tool will generate a custom report with feedback based on the maturity of a given workforce initiative and how you self-assess against the questions in this framework.
- **Examples are intended to be selected and adapted for use** according to what is most applicable to a given initiative, including setting specific qualitative or quantitative targets for the measure as appropriate. As noted above, some may not be relevant to your initiative or the level of effort may need to be scaled based on staff availability and expertise. For example, if you do not have access to marketing or communications staff, you can still be thoughtful about your outreach or leverage student support to help you meet baseline measures.

Impactful initiatives need not achieve all exemplary measures.

- **Measurement is dependent on the initiative scope;** the goal is not necessarily to achieve the exemplary measures for all activities.
- **Measurable indicators of activity success may be qualitative and/or quantitative.** Qualitative measures can include storytelling or testimonials, as quantitative measures may not always be available or easy to obtain. For example, while industry partners may be unable to provide longitudinal data on individual participants, they may be willing to share anecdotal evidence and demonstrate continued support for the initiative.
- Many exemplary measures may be more aspirational in nature and represent an ideal to work toward as part of **continuous improvement.**

Self-assessment does not represent NIIMBL endorsement.

- **NIIMBL is exploring an endorsement program** that will likely be grounded in the framework but with more extensive programmatic guidelines and requirements.
- Evaluating initiatives using the self-assessment tool can help give a clearer idea of the **kinds of improvements needed** in both the near and long term.

Where to Start

Use the decision tree below to determine the current phase of your initiative:

QUESTION		ACTION
1) Have you developed a curriculum, with industry input and involvement, and identified all necessary resources?	NO	➔ PLAN PHASE
	YES	➔ Go to question 2
2) Have you already secured resources and funding to conduct a pilot?	NO	➔ DEVELOP PHASE
	YES	➔ Go to question 3
3) Have you completed a pilot with an initial cohort?	NO	➔ PILOT PHASE
	YES	➔ SUSTAIN PHASE

PLAN

Define initiative scope, considering priority industry needs, target learners, instructional methodology, and resource requirements

Activities by Dimension of Impact

	<p>Industry & Partner ROI</p>	<p>Identify workforce needs and priorities</p>
	<p>Learner Impact</p>	<p>Determine target audience characteristics and motivations</p> <p>Develop learner outreach and marketing strategy</p>
	<p>Programming & Instruction</p>	<p>Define high-level learning objectives</p> <p>Define initiative type and instructional and/or assessment approach</p>
	<p>Effective Business Processes</p>	<p>Conduct a landscape analysis of existing, similar, or competing initiatives</p> <p>Clarify understanding of needed vs. available resources</p> <p>Synthesize an initiative business case</p>



Industry & Partner ROI

Align initiative with current and/or projected workforce needs

ACTIVITY: Identify workforce needs and priorities — Define the initiative scope based on demand for specific knowledge, skills, and abilities (KSAs) in the current and/or future workforce

CONSIDERATIONS & GUIDANCE

<p>Identify high-level initiative objective</p>	<p>Consider regions, occupations and roles, and worker experience (e.g., is the proposed solution a regional solution or national solution? Is it specific to particular occupations and roles? Is it focused on pipeline development or incumbent worker training/upskilling?)</p>
<p>Analyze labor market data</p>	<p>Leveraging existing industry-relevant studies and assessments, identify current and projected job growth, worker characteristics, wage trends, existing relevant instructional programs, and turnover and vacancy rates</p>
<p>Engage employers and industry experts to assess current and anticipated needs</p>	<p>Collect information on the proposed initiative to refine the high-level initiative objective, such as in-demand skills (technical and non-technical); hiring challenges (e.g., hard-to-fill occupations/roles); and changes in workforce needs (e.g., due to technology, process, policy, or customer preference)</p> <ul style="list-style-type: none"> • Assess the mix of stakeholders that must be engaged to collect representative input <ul style="list-style-type: none"> ○ Number of stakeholders engaged and participation/response rate ○ Type of stakeholders engaged (e.g., industry, community-based organizations, economic development organizations, unions, sector partnerships, consortia) ○ Organization size and geographic location ○ Job/role/functional area of stakeholders involved (e.g., corporate leadership, site managers, manufacturing managers, talent acquisition, human resources) • Potential engagement mechanisms: interviews, roundtables, surveys, and/or focus groups
<p>Define potential industry-relevant KSAs and training gaps that the initiative could address</p>	<p>Identify specific KSAs required by the industry and corresponding education and training requirements</p> <ul style="list-style-type: none"> • Leverage existing competency models, skill standards, labor market data, and/or regional and national workforce needs assessments

	<ul style="list-style-type: none"> Consider conducting a DACUM (Developing a Curriculum) or other structured method for analyzing jobs and occupations to better identify tasks performed by incumbent employees in particular roles
Work with industry to prioritize gaps based on urgency and impact	<p>To better focus the initiative, engage industry to identify the workforce KSAs that are most urgently needed and would yield the greatest potential impact to the industry, as well as the key initiative target (i.e., upskilling/reskilling of existing workers and/or training prospective/new job candidates)</p> <ul style="list-style-type: none"> Identify industry's initial willingness to invest or engage in the initiative (e.g., letters of support/commitment, funding, equipment, advisory board participation, initiative co-development and delivery)

ASSESSMENT QUESTION: To what extent have you identified the KSAs and target occupations needed by industry at the individual company, regional, or national level?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Qualitative capture of workforce needs and prioritized KSAs, derived from multiple credible sources and with some data-driven support</p> <ul style="list-style-type: none"> National-level data (e.g., current and projected jobs) from existing industry-relevant studies/assessments Informal industry engagement (e.g., small-scale surveys and interviews) 	<p>Quantitative supporting data from industry on prioritized KSAs and relevant occupations</p> <ul style="list-style-type: none"> Regional, employer-specific, and/or occupation-specific data (e.g., regional unfilled positions, projected unmet demand for relevant jobs in 5–10 years, supporting analysis for trends and drivers related to projected unmet demand, current time to fill positions, current time to contribution) and how the initiative will address these needs <p>Industry commitment to invest or engage in the initiative</p> <ul style="list-style-type: none"> Examples: letters of support/commitment, funding, equipment, advisory board participation, initiative co-development and delivery



Learner Impact

Enhance learner skill marketability and career opportunities

ACTIVITY: Determine target audience characteristics and motivations

— Understand and define the “market” (i.e., who the initiative is being designed for, including their characteristics, and any barriers to initiative participation)

CONSIDERATIONS & GUIDANCE

Assess characteristics of target learner	Consider age, background, education level, income, language, geographical location, occupation and role, employment status, motivations and goals, challenges, cultural or community influences, learning preferences, media and technology habits
Identify how learners will access initiative	Examples: open enrollment that anyone can sign up for, self-actuated by an incumbent employee who needs to get supervisor approval, supervisor sending employees to training, pipeline from another education or training program
Identify potential learner barriers to participation	Define the factors (e.g., time, money, location, language or literacy, technology access or skills, trust or stigma, cultural norms) that could stop or prevent someone from participating in the initiative
Evaluate the talent pipeline needed to deliver needed knowledge, skills, and abilities (KSAs)	Assess how job candidates and employees currently receive training related to the prioritized KSAs, and evaluate access to training in areas where occupation/role vacancies exist or are projected

ASSESSMENT QUESTION: To what extent have you identified your target audience’s characteristics and motivations for participation?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Qualitative capture of target audience characteristics and motivations that would define initiative format and structure</p> <ul style="list-style-type: none"> • Example information: geographical location, education level, employment status (i.e., currently working in life sciences vs. outside this sector), current and desired occupation and role, incentives and barriers to initiative participation • At least some information is gathered or validated through industry engagement 	<p>Quantitative, regionally specific data and robust qualitative understanding of target audience characteristics and motivations to align the target audience to the talent pipeline needed to fulfill occupation/KSA needs</p> <ul style="list-style-type: none"> • Example quantitative data: age, income, language, audience size • Example qualitative information: background, motivations and goals, cultural or community influences, learning preferences, media and technology habits • Information gathered through industry, community organizations, and/or engagement with prospective learners

ACTIVITY: Develop learner outreach and marketing strategy — Analyze outreach channels, define outreach approach, and outline initial messaging to reach the target learner audience and encourage them to participate in the initiative

CONSIDERATIONS & GUIDANCE

<p>Identify potential outreach channels</p>	<p>Determine which channel(s) will best help reach the target learner audience:</p> <ul style="list-style-type: none"> • Digital: social media, websites, email, ad campaigns • Traditional: posters, flyers, advertisements • In-person: trade shows, conferences, open house/site visits, other events and meetings, direct outreach to industry organizations • Organizational: Institutions, community and regional organizations, supervisors, teachers, networks, other influencers who could refer/encourage participation
<p>Evaluate channel reach, penetration, credibility, and effectiveness</p>	<p>Assess who each channel reaches, channel accessibility, how the audience interacts with the channel and frequency of use, audience views of channel credibility, and past experience with the effectiveness of channel engagement (e.g., open rates, click throughs, sign-ups, attendance)</p>
<p>Prioritize channels based on projected return on investment</p>	<p>Consider budget needed to effectively use a channel; staff time or expertise required; printing, design, or ad costs; and ongoing management</p>
<p>Define content needs in alignment with channels</p>	<p>Identify high-level content parameters, including use of visuals or interactivity, content complexity, calls to action, and how to communicate the initiative value proposition to the target audience</p>

ASSESSMENT QUESTION: To what extent have you demonstrated that the outreach and marketing strategy will effectively reach the target audience?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Qualitative assessment and prioritization of outreach channels (e.g., digital, traditional, in-person, organizational) based on target audience reach, channel credibility and effectiveness, and cost</p>	<p>Quantitative data to support outreach channel prioritization and allocation of marketing resources</p> <ul style="list-style-type: none"> Examples: projected number or percentage of target audience members that would be reached via prioritized channels, channel cost relative to reach



Programming & Instruction

Apply best practices to optimize initiative delivery and instructional effectiveness

ACTIVITY: Define high-level learning objectives — Develop clear, concise, and measurable statements that define what a participant should know or be able to do after completing the initiative

CONSIDERATIONS & GUIDANCE

<p>Define learning objectives based on desired initiative outcomes</p>	<p>Assess the change in knowledge, skills, abilities, or behaviors that the initiative is intended to enable (i.e., what learners need to know, be able to do, or feel differently about after participating in the initiative)</p>
<p>Refine objectives to be action-oriented and measurable</p>	<p>Leverage academically-recognized instructional design frameworks (e.g., Bloom’s Taxonomy, SMART—Specific, Measurable, Achievable, Relevant, and Time-bound—methodology) to ensure learning objectives are meaningful and learner achievement toward objectives can be assessed</p>
<p>Align objectives with target learner audience</p>	<p>Define the learner’s anticipated prior knowledge or skill level based on target learner characteristics, and assess the feasibility of whether the learning objectives will allow the target audience to achieve the industry-defined priority knowledge, skills, and abilities (KSAs)</p>

ASSESSMENT QUESTION: To what extent can you demonstrate that your learning objectives are linked to industry-defined KSAs?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Demonstration that learning objectives 1) follow validated and accepted methodologies and best practices and 2) align with prioritized industry and learner needs</p> <ul style="list-style-type: none"> • Leverages academically recognized instructional design framework (e.g., Bloom’s taxonomy, DACUM [Developing a Curriculum]) • Informal industry engagement (e.g., small-scale surveys and interviews) to validate high-level initiative objective and KSAs 	<p>Demonstration of more in-depth mapping (e.g., logic model) of needed KSAs to learning objectives, initiative outputs, and corresponding job roles and occupations</p> <ul style="list-style-type: none"> • Industry vetted learning objectives, with industry subject matter experts committed to driving initiative development (e.g., reviews from industry, initiative co-development)

ACTIVITY: Define initiative type and instructional and/or assessment approach — Outline methods and techniques the initiative will employ to achieve learning objectives and deliver instruction to participants

CONSIDERATIONS & GUIDANCE

Select initiative type	Based on target audience analysis and preliminary learning objectives, identify the initiative type (e.g., apprenticeship, hands-on course, e-learning)
Identify needed resources and constraints	Assess available time, staff, space, technology, platforms, and tools
Determine delivery format and level of interactivity	Define whether initiative will be in-person, online, or hybrid; synchronous (live) or asynchronous (self-paced); individual or group-based; and cadence of delivery method
Identify all instruction strategies and techniques	Consider use of lecture, case studies, role-play/simulations, group work, demonstration and practice, flipped classroom, microlearning, mixed methods <ul style="list-style-type: none"> • Use proven learning theories to guide the approach (e.g., experiential learning, constructivism, behaviorism, cognitivism, andragogy)
Define assessment approach to measure learning	Align the assessment type to the learning objectives, considering a variety of assessment methods such as summative assessments (e.g., exams, projects, hands-on practicum), formative assessments (e.g., quizzes, reflections, peer feedback), and learner evaluations (e.g., feedback on the initiative)

ASSESSMENT QUESTION: To what extent have you demonstrated that the defined instructional and assessment approach is able to accomplish the industry-aligned learning objectives and is accessible to the envisioned target audience/learner?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Demonstration that the initiative modality (e.g., in-person, virtual, hybrid, asynchronous), instructional methodology and techniques, and assessment approach will achieve the learning objectives</p> <ul style="list-style-type: none"> • Demonstrated alignment with content complexity, target audience size and characteristics, logistical feasibility and accessibility, and available resources • Demonstrated use of validated and accepted instructional and assessment methodologies and best practices • Demonstrated availability and suitability of resources, including instructors and instructional tools 	<p>More industry-relevant instruction and assessment, such as:</p> <ul style="list-style-type: none"> • Industry-relevant context for job roles and responsibilities (e.g., real-world operation and environments) • Hands-on, experiential learning • Demonstration-based assessment of skill performance • Use of rigorous, evidence-based instructional practices • Alignment with regionally or nationally recognized standards



Effective Business Processes

Support initiative success through sound operational planning and practices

ACTIVITY: Conduct a landscape analysis of existing, similar, or competing initiatives — Identify and examine existing initiatives, trends, and characteristics of initiatives within the biomanufacturing workforce development space to leverage previous efforts, better focus resources, and identify unique elements of initiative scope

CONSIDERATIONS & GUIDANCE

<p>Define analysis scope</p>	<p>Identify the characteristics of initiatives that should be included in the assessment: consider target learner audience; occupations and roles of focus; target knowledge, skills, and abilities (KSAs); and geographic reach</p>
<p>Define data needs and data sources</p>	<p>Identify desired data points, such as initiative goals and objectives, funding source and size, delivery model, key partners, duration/timeline, and evidence of effectiveness</p> <ul style="list-style-type: none"> Identify data sources (e.g., websites, reports, databases, and direct stakeholder input) for this information on relevant initiatives
<p>Synthesize best practices and lessons learned</p>	<p>Analyze compiled data to inform approaches that can streamline initiative development and avoid duplication of effort (e.g., identify potential partners; leverage existing resources, facilities, and equipment)</p>

ASSESSMENT QUESTION: To what extent can you demonstrate that the initiative will deliver unique or additive value by addressing an unmet/unfulfilled need or building on existing initiatives?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Assessment of a sample of existing competing, similar, and complementary initiatives, with synthesis of best practices and lessons learned to streamline initiative development and avoid duplication of effort</p>	<p>More comprehensive assessment across sectors, geographies, initiative types (depending on initiative scope), and stakeholders aligned with planned initiative scope</p> <ul style="list-style-type: none"> • Demonstration that initiative can integrate with and add value to current education/career pathways

ACTIVITY: Clarify understanding of needed vs. available resources —
 Outline all necessary resources for the initiative, take inventory of current resources, and source new ones

CONSIDERATIONS & GUIDANCE

<p>Identify all needed resources</p>	<p>Consider:</p> <ul style="list-style-type: none"> • Human resources (e.g., staffing, volunteers, contractors, instructors) • Material/physical resources (e.g., equipment, supplies, printed materials, facilities) • Technology (e.g., software, platforms, hardware) • Financial resources (e.g., seed funding, long-term funding, funding mechanisms) • Administrative/operational resources
<p>Inventory all available resources</p>	<p>Assess what resources are available to support and sustain the initiative</p>
<p>Perform a resource gap analysis</p>	<p>Evaluate the biggest gaps between what is needed and what is available, identify the gaps that are critical to develop and pilot the initiative, and prioritize accordingly</p>
<p>Strategize to fill gaps</p>	<p>Assess whether it is possible to reallocate existing resources, partner with another organization, or secure additional resources. If resources are limited, assess whether the initiative can be developed in phases or if the scope can be adjusted to match available resources</p>
<p>Build a resource plan</p>	<p>Map resource needs to the timeline to develop and sustain the initiative, assign ownership for securing and/or managing resources, and define future funding models</p>

ASSESSMENT QUESTION: To what extent have you identified and outlined a plan to procure the resources required to support the development and pilot of this initiative?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Clearly articulated list of resource requirements and outlined budget/estimated costs</p> <ul style="list-style-type: none"> • Example resources: instructors, staffing, partnerships, facilities, equipment, consumables 	<p>Detailed plan for securing resources, with demonstrated feasibility of securing them</p> <ul style="list-style-type: none"> • Examples: currently available resources, funding commitments, fundraising plans, equipment and facility access, in-kind contributions

ACTIVITY: Synthesize an initiative business case — Develop a value proposition for the initiative to help secure partnerships and other business-level support

CONSIDERATIONS & GUIDANCE

Articulate initiative value proposition	Clearly define the unique gap or issue that the initiative will address, such as target learner audience, target KSAs, complexity of learning objectives, and geography
Outline initiative scope and implementation approach	Synthesize takeaways from industry needs assessments, target learner outreach strategy, and learning objectives and instructional methodology
Demonstrate anticipated return on investment	Conduct a cost-benefit analysis, presenting key advantages and impacts of the initiative on target stakeholders, and estimating high-level costs and resource needs
Conduct a risk assessment	Include mitigation strategies that can ensure initiative success





ASSESSMENT QUESTION: To what extent does your initiative’s business case demonstrate that the initiative can be successfully developed, piloted, and sustained (if applicable)?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Clear articulation of initiative impacts and value for both learners and industry, required resources, and needed funding</p> <ul style="list-style-type: none"> • Synthesis of all data gained through the Plan phase • Defensible cost estimates based on initiative throughput and cost per person to train 	<p>More robust demonstration of the initiative business case, such as:</p> <ul style="list-style-type: none"> • Secured or pledged resources and committed partners (e.g., teaming agreements) • Potential for initiative sustainment and scalability (e.g., long-term funding/revenue models) • Risk assessment and mitigation plans (e.g., operational, financial, market)

DEVELOP

Validate and refine initiative value to industry and learners, develop curriculum, and define implementation plan

Activities by Dimension of Impact

	<p>Industry & Partner ROI</p>	<p>Validate value proposition for industry</p> <p>Obtain industry inputs to and feedback on draft initiative materials, curriculum, and/or assessment</p>
	<p>Learner Impact</p>	<p>Validate value proposition for the learner</p>
	<p>Programming & Instruction</p>	<p>Define needed programmatic resources</p> <p>Develop and vet initiative materials, curricula, and/or assessments</p>
	<p>Effective Business Processes</p>	<p>Outline an initiative operational plan</p> <p>Establish a communications plan</p> <p>Develop an evaluation plan</p>



Industry & Partner ROI

Align initiative with current and/or projected workforce needs

ACTIVITY: Validate value proposition for industry — Build out and refine a value proposition for the initiative that meets the needs outlined by industry and garners industry support and engagement

CONSIDERATIONS & GUIDANCE

<p>Obtain feedback on employer expectations and learning objectives</p>	<p>Seek input on employers’ expectations for the skills and knowledge learners should gain and industry’s perception of whether the initiative’s delivery methods would ensure learners will be able to perform needed job functions</p> <ul style="list-style-type: none"> • Consider the most desired skills, current and projected skill shortages, new and emerging technologies, market shifts, and policy • Assess the mix of stakeholders that must be engaged to collect representative input <ul style="list-style-type: none"> ○ Number of stakeholders engaged and participation/response rate ○ Type of stakeholders engaged (e.g., human resources [HR] managers, hiring managers, talent acquisition specialists, industry association leaders, front-line managers, subject matter experts, government or regulatory bodies, community-based organizations, economic development organizations, unions) ○ Organization size and geographic location ○ Job/role/functional area of stakeholders involved (e.g., corporate leadership, site managers, manufacturing managers, talent acquisition, human resources) • Potential engagement mechanisms: interviews, roundtables, surveys, and/or focus groups
<p>Consider cost vs. benefit perception</p>	<p>Determine if the perceived benefits of the initiative (i.e., extent to which the initiative will result in trained workers with needed knowledge, skills, and abilities [KSAs] regionally or nationally) outweigh the costs (in time, money, or effort)</p>
<p>Align on needed industry support for the initiative</p>	<p>Evaluate and secure commitments from industry, including:</p> <ul style="list-style-type: none"> • Commitments for human resources for development (e.g., support for program development, review, revision, and validation) • Capital resources for development (e.g., funding, facilities, equipment)

- Other commitments related to future program delivery (e.g., tours, experiential learning opportunities, guaranteed trainees, guaranteed interviews/hiring)

ASSESSMENT QUESTION: To what extent has industry confirmed there is sufficient value in the initiative such that they are willing to support its development and implementation?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Demonstrated alignment between training providers and industry on initiative scope and focus</p> <ul style="list-style-type: none"> • Clearly articulated value proposition with projected industry return on investment (e.g., number of participants per year compared with open or projected position vacancies, decreased time to fill positions, reduced employee time to contribution, improved employee job performance) <p>In-kind industry support</p> <ul style="list-style-type: none"> • Examples: participation in subject matter reviews, advisory board participation, initiative delivery and instruction, marketing and outreach support • Small number of industry early adopters/participants 	<p>Committed industry resources beyond time</p> <ul style="list-style-type: none"> • Examples: funding, access to facilities and equipment for experiential learning opportunities, commitments to drive enrollment and participant hiring • Broader industry commitment, dependent on initiative scope (i.e., engaged decision makers and/or a greater number of organizations)

ACTIVITY: Obtain industry inputs to and feedback on draft initiative materials, curriculum, and/or assessment — Engage with industry to ensure initiative aligns with current and anticipated industry needs, including priority KSAs and occupations

CONSIDERATIONS & GUIDANCE

Assess extent of industry involvement in initiative delivery	Determine how industry should be involved beyond providing feedback on initiative materials, curriculum, and/or assessment, such as providing case studies, guest speakers, instruction, evaluation, mentorship support to participants, and experiential opportunities
Define clear objectives and level of detail for feedback	Outline what feedback is needed, on what aspects of the initiative (e.g., learning objectives, instructional methodology, curriculum content, assessment), and what level of detail is required (e.g., broad strategic input, tactical feedback, high-level feedback, specific recommendations)
Determine the right stakeholders for feedback	Identify the stakeholder perspectives and subject matter expertise needed, as well as the desired mix of feedback across these perspectives, considering: <ul style="list-style-type: none"> • Type of stakeholders engaged (e.g., front-line managers, subject matter experts) • Organization size and geographic location
Define mechanisms for ongoing and iterative feedback	Define the process and expectations for review of the initiative as it is developed, piloted, and/or sustained

ASSESSMENT QUESTION: To what extent has industry been involved in developing, reviewing, revising, and/or validating initiative program materials, curricula, and/or assessments?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Qualitative positive feedback from industry that demonstrates industry confidence in the initiative content</p> <ul style="list-style-type: none"> Informal industry input through ad hoc engagement (e.g., surveys, focus groups / roundtables, individual meetings and interviews) 	<p>Industry commitment to participate in initiative delivery</p> <ul style="list-style-type: none"> Examples: initiative co-development, instruction and guest speakers, case studies, mentorship, commitment to provide data on initiative impact <p>Clearly articulated mechanism and defined frequency for ongoing feedback to inform initiative improvements and ensure alignment with current and projected industry needs</p>



Learner Impact

Enhance learner skill marketability and career opportunities

ACTIVITY: Validate value proposition for the learner — Corroborate and refine the initiative’s outlined benefits and value to participants

CONSIDERATIONS & GUIDANCE

<p>Assess mechanisms for engaging or learning about prospective learners</p>	<p>Consider past initiatives, conversations with industry or community organizations who engage with the target learner audience, or through direct interaction with the target audience</p> <ul style="list-style-type: none"> • Examples: job seekers, students, current workforce with relevant characteristics
<p>Consider cost vs. benefit perception</p>	<p>Determine whether the perceived benefits (e.g., increased skill marketability, job opportunities, promotion opportunities, compensation, job satisfaction, job performance, professional networks, career pathways, professional pride and motivation) of the initiative outweigh the costs (in time, money, or effort)</p> <ul style="list-style-type: none"> • Consider initiative affordability, available funding/support, time commitment, scheduling constraints, accessibility, and delivery format (e.g., experiential/interactive opportunities)
<p>Refine value proposition</p>	<p>Synthesize and integrate findings to better capture interests and needs of the target audience</p>

ASSESSMENT QUESTION: To what extent have target learners or learner proxies (e.g., industry, community organizations) confirmed they perceive value in the initiative and would be interested in participating?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Demonstrated understanding of and clearly articulated value proposition of the range of projected learner return on investment (ROI)</p> <ul style="list-style-type: none"> • Examples of learner ROI: increased skill marketability, job opportunities and quality, promotion opportunities, compensation, job satisfaction, job performance, professional networks, career pathways, professional pride and motivation • Alignment with target audience characteristics (e.g., geographical location, education level, employment status, current and desired occupation and role, incentives and barriers to initiative participation, age, background, income, language, motivations and goals, cultural or community influences, learning preferences, media and technology habits) <p>Qualitative positive feedback from target learners and/or learner proxies that demonstrates learner interest in the initiative</p>	<p>Planned engagement mechanisms with learners pre- and post-initiative</p> <ul style="list-style-type: none"> • Examples: survey, focus groups, self-reflection tools <p>Demonstration of industry-relevant instruction and assessment, such as:</p> <ul style="list-style-type: none"> • Hands-on, experiential learning relevant to job roles/industry sector • Ability to demonstrate learner knowledge and skill growth • Management of student expectations of job requirements and career pathways <p>Quantitative positive feedback from target learners and/or learner proxies that demonstrates learner interest in the initiative (e.g., survey feedback)</p>



Programming & Instruction

Apply best practices to optimize initiative delivery and instructional effectiveness

ACTIVITY: Define needed programmatic resources — Assess needed equipment, facilities, instructors, and any other resources needed to implement the initiative

CONSIDERATIONS & GUIDANCE

<p>Refine needed instructional resources</p>	<p>Based on resource inventory, gap analysis, and resource plan (from Plan phase), further define the following resources:</p> <ul style="list-style-type: none"> • Human resources (e.g., instructors, programming staff, volunteers, contractors) • Equipment and facilities (e.g., lab equipment, lab or classroom training space, instructional materials and supplies) • Instructional technology (e.g., software, platforms, hardware)
<p>Assess resource characteristics and requirements</p>	<p>Consider:</p> <ul style="list-style-type: none"> • Relevance and value (i.e., what resources are most critical to achieve learning objectives) • Quantity (e.g., instructors, physical space capacity, equipment and technology) • Accessibility (e.g., usability, cost, accommodations, and convenience) • Compliance (e.g., legal, safety, and/or policy considerations) • Scalability and sustainability (i.e., can resources grow with the initiative)
<p>Determine sources from which to acquire resources</p>	<p>Identify internal, vendors, partners, or community sources, as well as their value, reliability, and/or mission alignment, and work through operational plan to secure them (see “Effective Business Processes”)</p>

ASSESSMENT QUESTION: To what extent are programmatic resource requests well documented?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Refined and validated resource requirements and plans for securing them (e.g., purchase requests; requests to hire, contract, or seek volunteers)</p> <ul style="list-style-type: none"> • Demonstrated availability and suitability of resources (e.g., instructor(s) with relevant industry experience; quantity and accessibility of equipment, facilities, materials, and tools) 	<p>Identified sources for resource acquisition (e.g., internal, vendors, partners, or community sources)</p> <ul style="list-style-type: none"> • Vendors/sources reviewed for price, quality, and availability comparison (materials, technology, and facilities) • Qualified candidates identified for staff and instructor positions

ACTIVITY: Develop and vet initiative materials, curriculum, and/or assessment — Engage iterative third-party review to evaluate initiative content, instructional methods, and assessments to ensure they are accurate, relevant, effective, and aligned with industry and learner needs

CONSIDERATIONS & GUIDANCE

<p>Develop and assess curriculum content</p>	<p>Ensure content supports learning objectives and is aligned with industry needs, including current technology, policy, and standards, as well as learner characteristics and needs</p> <ul style="list-style-type: none"> • Integrate real-world relevance: Emphasize skill development through experiential learning and instructional methods focused on skill application and performance. In addition to technical skills, consider integration of business and leadership skills (e.g., team collaboration, public speaking, critical thinking) • Ensure initiative program materials, curricula, and/or assessment methodology and approach are aligned with the target learner’s characteristics, needs, and motivations • Consider customizability and adaptability: Ensure content is modular/editable so it can be further tailored to more specific audiences (e.g., regionally, specific company) or adapted to different formats (e.g., virtual vs. in-person)
<p>Identify assessment tools to evaluate learner knowledge and skill development</p>	<ul style="list-style-type: none"> • Use quality assessments and support for measuring learning (e.g., performance-based assessments, projects, quizzes) • Capture learner data for tracking progress and initiative effectiveness with achieving learning objectives
<p>Ensure and evaluate instructional quality</p>	<ul style="list-style-type: none"> • Ensure curriculum is engaging, pedagogically sound, and well-structured, allowing learners to apply, practice, and evaluate their knowledge and skills • Use credible sources (e.g., authors/instructors are subject matter experts, material is from a recognized and trusted source such as accredited institutions or industry associations) • Ensure the curriculum is evidence-based and informed by instructional best practices
<p>Assess and prepare materials for professional development credit processes, if applicable</p>	<p>If the initiative intends to include continued education units (CEUs) or professional development hours (PDHs), evaluate the feasibility of their inclusion</p>

ASSESSMENT QUESTION: To what extent are initiative materials, curriculum, and/or assessments designed to align with current and emerging industry needs and target learner characteristics?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Demonstrated alignment of training materials, curriculum, and/or assessment with industry needs and target learner characteristics</p> <ul style="list-style-type: none"> • In-depth mapping (e.g., logic model) of needed knowledge, skills, and abilities (KSA)s to learning objectives, initiative outputs, and corresponding job roles and occupations • Informal industry engagement (e.g., small-scale surveys and interviews, material mark-up) to review initiative materials, curriculum, and/or assessments <p>Demonstrated quality of initiative content and instructional materials</p> <ul style="list-style-type: none"> • Leverages instructional best practices and credible sources (e.g., subject matter experts, information from trusted associations) • Instructional methods and assessments focused on skill proficiency and performance • Clear and demonstrated plan for instructor evaluation 	<p>Integration of industry-relevant instruction and assessment, such as:</p> <ul style="list-style-type: none"> • Industry-relevant context for job roles and responsibilities (e.g., real-world operation and environments) • Hands-on, experiential learning • Demonstration-based assessment of skill performance • Use of rigorous, evidence-based instructional practices • Alignment with regionally or nationally recognized standards • Integration of relevant business and leadership skills <p>Clearly articulated mechanism and defined frequency for ongoing feedback to inform initiative improvements and ensure alignment with current and projected industry needs</p> <ul style="list-style-type: none"> • Advisory board of industry and instructors with relevant experience informing feedback on curriculum • Engagement from employees who have recently attained the target KSAs and/or their employers



Effective Business Processes

Support initiative success through sound operational planning and practices

ACTIVITY: Outline an initiative operational plan — Develop a logistical plan for successfully executing the initiative

CONSIDERATIONS & GUIDANCE

<p>Establish operational goals and milestones</p>	<p>Define the following:</p> <ul style="list-style-type: none"> • Frequency of initiative • Enrollment goals • Budget requirements and expected revenue over time, if applicable (i.e., reliance on external funding, goal of revenue generation, plan to achieve cost neutrality or operate at a loss) • Initial plans for initiative sustainment and/or scale-up
<p>Define and assign tasking</p>	<p>Outline specific tasks needed to reach each goal and stakeholders involved in completing them</p> <ul style="list-style-type: none"> • Consider employing a project management tool (e.g., RACI matrix, MOCHA framework, project planner) to help clarify responsibilities and/or assigning personnel as a project manager
<p>Refine required administrative resources</p>	<p>Include funding, administrative staff, logistical process tools (e.g., registration, accounting infrastructure), intellectual property agreements, insurance, licenses, software, and office equipment and supplies</p>
<p>Establish data management practices</p>	<p>Identify and implement mechanisms to protect sensitive information</p>
<p>Assess potential risks and develop a risk management strategy</p>	<p>Consider potential risks, mitigation strategies, and contingency plans</p>
<p>Acquire resources</p>	<p>Develop internal agreements and formal contracts with external entities to secure administrative resources and instructional resources requested through programmatic support</p>

ASSESSMENT QUESTION: To what extent does your initiative’s operational plan demonstrate that the initiative can be successfully piloted and sustained (if applicable)?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Clearly articulated goals, milestones, and roles and responsibilities</p> <ul style="list-style-type: none"> • Frequency of initiative, enrollment targets, cost per participant • Internal processes, including logistics, data management, and risk management • Informed by engagement with key internal and external stakeholders (e.g., leadership, managers, partners) <p>Detailed budget and plan for securing resources in alignment with implementation timeline and milestones</p> <ul style="list-style-type: none"> • Example plans: agreements and contracts for funding, human resources, equipment and facility access, instructional technology 	<p>More robust operational plan that extends beyond the initiative pilot, with components such as:</p> <ul style="list-style-type: none"> • Potential for initiative sustainment and scalability (e.g., long-term funding/revenue models, potential to adapt to different formats/topics or expand to different audiences and/or regions) • Risk assessment and mitigation plans (e.g., operational, financial, market)

ACTIVITY: Establish a communications plan — Develop a strategy for conducting targeted outreach about the initiative with messaging tailored by channel for each key stakeholder group (learners, industry, regional organizations, community)

CONSIDERATIONS & GUIDANCE

Conduct an audience analysis	<ul style="list-style-type: none"> • Identify each target audience for outreach, considering which industry, learner, and community stakeholders should engage with the initiative and why (e.g., learners – registration, industry – support, community – promotion) • Align target audiences with outreach channels; identify the channels best suited for each audience type
Develop a content strategy	<ul style="list-style-type: none"> • Craft key messages tailored to each audience and outreach channel type • Identify the call to action (CTA) / action you want each audience to take • Develop content appropriate to each prioritized channel; consider level of specialized support that may be required / desired (e.g., digital development, videography, graphic design), depending on resources <ul style="list-style-type: none"> ○ Digital: social media posts, website content, email marketing and/or newsletters, paid ad campaigns, radio spots ○ Traditional / in person: posters, flyers, advertisements, event materials
Develop an implementation plan	<ul style="list-style-type: none"> • Identify metrics for analysis to ensure outreach is effectively reaching key audiences. Examples include: <ul style="list-style-type: none"> ○ Digital: social media and website (engagement rates), email (open rate), paid ads (clicks) ○ Traditional / in person: sign up / attendance • Develop an outreach timeline / frequency cadence aligned with the CTAs • Assign ownership of tasks (e.g., writing, distribution, monitoring feedback, metrics analysis)

ASSESSMENT QUESTION: To what extent does your initiative’s communication plan demonstrate your ability to successfully engage key stakeholder groups?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Clearly articulated communications plan that demonstrates key messages and content are tailored to all target audiences and outreach channels</p> <ul style="list-style-type: none"> • Outreach timeline is realistic and content/materials are aligned with budget • Outlined key performance indicators (KPIs) (e.g., projected engagement, referrals) to assess return on investment • Analytics tracking mechanisms are in place • Defined roles and responsibilities 	<p>More robust communications plan, with components such as:</p> <ul style="list-style-type: none"> • Opportunities for feedback and input from target audiences • Plans for ongoing participant engagement beyond initiative completion (e.g., career pathway tracking, mentorship, guest speakers)

ACTIVITY: Develop an evaluation plan — Outline a plan to assess the success of the initiative in meeting industry needs in a sustainable manner

CONSIDERATIONS & GUIDANCE

<p>Define stakeholders who must inform the evaluation plan</p>	<p>Identify the goals and key stakeholders of the evaluation (e.g., learners, instructors/facilitators, industry partners/employers, program managers, or sponsors); consider formative, summative, process, and/or outcome evaluations</p>
<p>Solidify indicators of success</p>	<p>Refine and synthesize the indicators that will provide evidence of a successful initiative—both in the short-term and long-term; consider KPIs and benchmarks (e.g., assessment targets, measures of engagement, job placement and tenure) by dimension of impact</p> <ul style="list-style-type: none"> • Industry & Partner ROI: Demonstration of increased participant skill and performance, reduced internal training, reduced time to hire, reduced employee time to contribution; participants trained per year; representative industry stakeholder engagement; alignment with industry market data (e.g., occupations, current and anticipated positions to fill, needed knowledge, skills, and abilities [KSAs]); resources committed compared with value realized • Learner Impact: Registration/enrollment numbers; increased skill marketability, job opportunities and quality, promotion opportunities, compensation, job satisfaction, job performance, professional networks, career pathways, professional pride and motivation; willingness to refer other participants • Programming & Instruction: Committed industry resources and consistent participation in initiative development and delivery; demonstration that initiative learning objectives, curriculum, and instructional methodology are aligned with current and projected industry needs (KSAs, occupations); demonstration that curriculum is engaging, informed by instructional best practices, and well-structured, allowing learners to apply, practice, and evaluate their knowledge and skills; assessment of instructor effectiveness • Effective Business Processes: Secured resources (human resources, facilities, equipment, technology, supplies, software, logistical process tools); clear operational goals and milestones along with tracking mechanisms and clear roles/responsibilities; robust data management practices; robust risk management strategy; sustainable funding strategy; positive/neutral profits and loss sheet

Outline logistics of evaluation	Select data collection methods (e.g., quantitative, qualitative, and mixed), timeline and frequency, resources of evaluation (e.g., budget, human resources, and tools and technology), and ethics (e.g., confidentiality, consent, and bias)
Outline plan for data management, analysis, and reporting	Establish a plan for data analysis and reporting to understand and communicate findings, ensuring the report delineates actionable insights; use results for continuous initiative improvement




ASSESSMENT QUESTION: To what extent does your initiative’s evaluation plan demonstrate that you can successfully assess the outcomes of your initiative?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Clearly defined KPIs and benchmarks by dimension of impact (i.e., Industry & Partner ROI, Learner Impact, Programming & Instruction, Effective Business Processes)</p> <p>Clearly defined data collection, management, analysis, and reporting plan, including key stakeholders, methods, and frequency</p>	<p>More robust evaluation plan that extends beyond the initiative pilot, with components such as:</p> <ul style="list-style-type: none"> • Demonstrated use of validated and accepted methodologies and best practices for evaluation • More comprehensive set of defined KPIs (SMART: Specific, Measurable, Achievable, Relevant, Time-bound) and corresponding collection, management, analysis, and reporting plan • Plans for obtaining longitudinal data from industry on participant employment/performance

PILOT

Launch initiative on a small scale to evaluate its success and develop an operational plan to sustain it

Activities by Dimension of Impact

	<p>Industry & Partner ROI</p>	<p>Secure industry champions for initiative</p> <p>Collect and communicate data from the pilot related to industry-relevant metrics</p>
	<p>Learner Impact</p>	<p>Recruit participants</p> <p>Collect and communicate data from the pilot related to learner impact metrics</p>
	<p>Programming & Instruction</p>	<p>Deliver initiative to initial cohort of learners</p> <p>Collect and analyze data from the pilot related to programming and instruction metrics</p>
	<p>Effective Business Processes</p>	<p>Demonstrate business case for sustainment</p> <p>Refine planning for initiative sustainment</p>



Industry & Partner ROI

Align initiative with current and/or projected workforce needs

ACTIVITY: Secure industry champions for initiative — Establish sustained engagement from industry representatives who will help ensure continued initiative alignment with industry needs and expand initiative awareness and recognition

CONSIDERATIONS & GUIDANCE

<p>Identify key industry and partner influencers, decision-makers, and subject matter experts</p>	<p>Building on industry engagement during initiative planning and development, identify the industry contacts needed to maintain the initiative’s industry relevance, inform continuous initiative improvements, help drive enrollment and/or job placement of participants, and help capture and communicate the initiative’s value and impact</p> <ul style="list-style-type: none"> • Determine needed industry representation <ul style="list-style-type: none"> ○ Number of stakeholders engaged and participation/response rate ○ Type of stakeholders engaged (e.g., industry, community-based organizations, economic development organizations, unions, sector partnerships, consortia) ○ Organization size and geographic location ○ Job/role/functional area of stakeholders involved (e.g., corporate leadership, site managers, front-line manufacturing managers, HR managers, hiring managers, talent acquisition specialists, industry association leaders, subject matter experts) • Identify individuals from industry who have been integral to initiative development and work with them to identify others within their organization who should be engaged and/or informed about the initiative, broadening initiative awareness and mitigating potential turnover of key representatives
<p>Develop an industry engagement plan</p>	<p>Leverage the broader initiative communications plan to:</p> <ul style="list-style-type: none"> • Align communications channels and engagement mechanisms with different industry roles based on how they should optimally be engaged to maximize the initiative’s impact • Define the incentives/benefits of engagement for industry, including more direct access to talent, ability to inform initiative curriculum and

	<p>instructional methodology, sponsorship visibility, reduced initiative participation cost, and reduced internal training costs</p> <ul style="list-style-type: none"> Outline the frequency and expectations of engagement (i.e., the specific role and calls to action from industry representatives), ensuring industry champions are actively engaged and feel invested in the initiative
Confirm industry commitments	<p>Obtain a statement or other assurance from industry representatives clarifying their role in and goals for the initiative, such as committed resources (e.g., funding, facilities, equipment), instructional support, experiential learning opportunities, curriculum/assessment reviews, participant referrals for enrollment, marketing support, or initiative feedback to inform continuous improvement)</p>

ASSESSMENT QUESTION: To what extent has industry committed to support the initiative’s development and implementation?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>In-kind industry support</p> <ul style="list-style-type: none"> Examples of support: participation in subject matter reviews, advisory board participation, initiative delivery and instruction, marketing and outreach support, industry engagement with candidates, initiative feedback to inform continuous improvement Sustained support from a small number of industry early adopters/participants 	<p>Committed industry resources beyond time</p> <ul style="list-style-type: none"> Examples of support: funding, access to facilities and equipment for experiential learning opportunities, commitments to drive enrollment and participant hiring, addition of initiative to preferred hiring requirements Broader industry commitment, dependent on initiative scope (i.e., engaged decision makers and/or a greater number of organizations) <p>Clearly articulated mechanism and defined frequency for ongoing feedback to inform initiative improvements and ensure alignment with current and projected industry needs</p>

ACTIVITY: Collect and communicate data from the pilot related to industry-relevant metrics — Collect data needed to evaluate the initiative’s alignment with industry needs, and communicate results to inform initiative improvements and grow industry support and recognition of the initiative

CONSIDERATIONS & GUIDANCE

Execute on evaluation plan	<p>Capture data about indicators of success relevant to industry</p> <ul style="list-style-type: none"> • Examples: <ul style="list-style-type: none"> ○ Demonstration of increased participant skill and performance, reduced internal training, reduced time to hire, and/or reduced employee time to contribution ○ Participants trained per year ○ Representative industry stakeholder engagement ○ Alignment with industry market data, including occupations, current and anticipated positions to fill, and needed knowledge, skills, and abilities (KSAs) ○ Resources committed compared with value realized • Define data collection frequency (e.g., 1 month following initiative, 6 months, 1 year, 2 years) • Employ data collection methods from evaluation plan to collect relevant data, including from industry partners and initiative learners • Implement data management and analysis plan outlined in evaluation plan
Assess data quality	<p>Ensure data is reliable, up-to-date, comprehensive, unbiased, and representative</p> <ul style="list-style-type: none"> • Identify data and data collection process errors and inaccuracies • Identify data gaps and plans to fill them
Synthesize and communicate findings	<p>Leverage communications plan to align available data with key messages to demonstrate the industry value proposition</p> <ul style="list-style-type: none"> • Define and prioritize initiative changes that will better align the initiative with industry needs

ASSESSMENT QUESTION: To what extent can you demonstrate that the initiative provides a return on investment to industry?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Qualitative positive feedback (e.g., testimonials) from industry that demonstrates industry’s perceived value of the initiative</p> <ul style="list-style-type: none"> • Examples: reduction in unfilled positions or time to fill, more qualified candidates, reduced employee time to contribution, improved employee performance <p>Clearly defined data collection, management, analysis, and reporting plan, including key stakeholders, methods, and frequency</p> <ul style="list-style-type: none"> • Clearly defined key performance indicators and benchmarks 	<p>Quantitative data from industry that demonstrates industry’s realized value from the initiative</p> <ul style="list-style-type: none"> • Alignment with industry market data, including occupations, current and anticipated positions to fill • Data comparisons of initiative participants with similar groups who did not participate • Examples: number of initiative participants that industry interviews, hires, or promotes; reduction in unfilled positions or time to fill; reduced employee time to contribution; improved employee performance; time to promotion; skills competency scores <p>Multiple methods used for collecting and reporting data on initiative impact</p> <ul style="list-style-type: none"> • Collection examples: survey/feedback forms, interviews, roundtables, focus groups • Reporting examples: Industry case studies and testimonials that can be used in future initiative marketing and communications



Learner Impact

Enhance learner skill marketability and career opportunities

ACTIVITY: Recruit participants — Conduct outreach to target learner audience and enroll participants in the initiative pilot

CONSIDERATIONS & GUIDANCE

Execute communications plan for target learner audience	<p>Use identified outreach channels to message initiative details and value proposition to prospective participants, communicating a clear call to action and intuitive enrollment process in all materials</p> <ul style="list-style-type: none"> • Coordinate with relevant recruitment partners, including industry employers, community-based organizations (e.g., adult education centers, workforce boards), academic institutions, and local government, to promote the initiative to the target learner audience
Support prospective participants during the enrollment process	<p>Work with learners to ensure they are successfully able to enroll (e.g., online, in-person, assisted), answer any questions and address any concerns, communicate logistical information, and provide any preparatory or background materials</p> <ul style="list-style-type: none"> • Identify any potential opportunities for participation support (e.g., stipends, employer training-focused paid time off)
Track and analyze metrics for target learner outreach	<p>Assess whether the target learner audience is engaging with outreach content and mechanisms</p> <ul style="list-style-type: none"> • Adjust outreach strategy, as needed, to reach target audience and achieve enrollment objectives

ASSESSMENT QUESTION: To what extent has the initiative met its pilot enrollment objectives?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Enrollment metrics</p> <ul style="list-style-type: none"> • Examples: number of individuals who apply for and/or enroll in the initiative compared with enrollment targets <p>Qualitative demonstration of alignment between enrolled participant characteristics and target learner characteristics</p> <ul style="list-style-type: none"> • Examples: geographical location, education level, employment status (i.e., currently working in life sciences vs. outside this sector), current and desired occupation and role <p>Qualitative assessment of target audience outreach strategy</p> <ul style="list-style-type: none"> • Examples: how interested candidates heard about the initiative, why prospective learners were interested in participating, satisfaction of enrollment process 	<p>Quantitative demonstration and more robust qualitative alignment between enrolled participant characteristics and target learner characteristics</p> <ul style="list-style-type: none"> • Example quantitative data: age, income, language • Example qualitative information: background, motivations and goals, cultural or community influences <p>Quantitative assessment of target audience outreach strategy</p> <ul style="list-style-type: none"> • Examples: social media and website engagement rates, email open rate, paid ad clicks, sign-up / attendance at promotional events, cost of marketing approaches compared with reach/enrollment

ACTIVITY: Collect and communicate data from the pilot related to learner impact metrics — Collect data needed to evaluate learner engagement with the initiative and increased learner skill marketability

CONSIDERATIONS & GUIDANCE

<p>Execute on evaluation plan</p>	<p>Capture data about indicators of success relevant to learner impact</p> <ul style="list-style-type: none"> • Examples: registration/enrollment numbers; increased skill marketability, job opportunities and quality, promotion opportunities, compensation, job satisfaction, job performance, professional networks, career pathways, professional pride and motivation; willingness to refer other participants • Define data collection frequency (e.g., 1 month following initiative, 6 months, 1 year, 2 years) • Employ data collection methods from evaluation plan to collect relevant data, including from industry partners and initiative learners • Implement data management and analysis plan outlined in evaluation plan
<p>Assess data quality</p>	<p>Ensure data is reliable, up-to-date, comprehensive, unbiased, and representative</p> <ul style="list-style-type: none"> • Identify data and data collection process errors and inaccuracies • Identify data gaps and plans to fill them
<p>Identify and capture learner case studies</p>	<p>When collecting data from participants, identify learners with compelling success stories or testimonials that could help demonstrate the value of the initiative to future prospective learners</p>
<p>Synthesize and communicate findings</p>	<p>Leverage communications plan to align available data with key messages to demonstrate the learner value proposition</p> <ul style="list-style-type: none"> • Define and prioritize initiative changes that will better align the initiative with learner needs

ASSESSMENT QUESTION: To what extent does the initiative successfully engage learners and deliver a return on investment for participants?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Qualitative positive feedback from learners that demonstrates their engagement in and perceived value of the initiative</p> <ul style="list-style-type: none"> Engagement examples: participant completion rates, drop-off points, frequency or duration of engagement, time to complete initiative, satisfaction and willingness to refer Value examples: extent of industry-relevant instruction and assessment, increased skill marketability, job opportunities and quality, promotion opportunities, compensation, job satisfaction, job performance, professional networks, career pathways, professional pride and motivation, long-term access to initiative materials <p>Clearly defined data collection, management, analysis, and reporting plan, including key stakeholders, methods, and frequency</p> <ul style="list-style-type: none"> Clearly defined key performance indicators and benchmarks 	<p>Quantitative data from learners that demonstrates their increased skill marketability</p> <ul style="list-style-type: none"> Examples: interviews secured, job placement rates, promotions attained post-initiative, credential attainment or skills demonstration through performance-based assessments, education/career progression, employment persistence, earnings growth <p>Multiple methods used for collecting and reporting data</p> <ul style="list-style-type: none"> Collection examples: participation/engagement tracking, self-reflection tools, survey/feedback forms, interviews, roundtables, focus groups Reporting examples: learner case studies and testimonials that can be used in future initiative marketing and communications



Programming & Instruction

Apply best practices to optimize initiative delivery and instructional effectiveness

ACTIVITY: Deliver initiative to initial cohort of learners — Put operational plan into action to deliver training materials, curriculum, and assessments to pilot learners

CONSIDERATIONS & GUIDANCE

<p>Coordinate resources and logistics to execute instructional plan</p>	<p>Leverage initiative operational plan to coordinate:</p> <ul style="list-style-type: none"> • Human resources, including communication with and engagement of instructors, participants, and other program and instructional staff support • Equipment and facilities, including access to and scheduling of lab equipment, setup of lab or classroom training space, organization of instructional materials and supplies • Instructional technology setup, including software, platforms, hardware, and physical instructional materials (e.g., notebooks, handouts)
<p>Deliver instructional material</p>	<p>Ensure alignment with learning objectives, industry-vetted curriculum, and initiative assessment tools</p>
<p>Implement risk mitigation and contingency plans as needed</p>	<p>Monitor resources and make any real-time adjustments to improve the learner experience and ensure training initiative alignment with initiative operational plan</p>

ASSESSMENT QUESTION: To what extent was the pilot delivered as planned?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Demonstration of successful coordination of resources and logistics</p> <ul style="list-style-type: none"> • Reliable access to equipment, facilities, and technology • Qualified instructors and other programmatic staff support • Instructional setup, including software, platforms, hardware, and physical instructional materials • Implementation of risk mitigation and contingency plans, if needed 	<p>Integration of real-world industry relevance</p> <ul style="list-style-type: none"> • Examples: skill development through experiential learning, instructional methods and assessment focused on skill application and performance <p>Demonstrated use of continuous formative assessments to inform real-time pilot adjustments</p> <ul style="list-style-type: none"> • Examples: participant feedback, polls, quizzes, informal assessment of knowledge and skill development

ACTIVITY: Collect and analyze data from the pilot related to programming and instruction metrics — Collect data needed to evaluate initiative curriculum, materials, assessments, and delivery effectiveness

CONSIDERATIONS & GUIDANCE

<p>Execute on evaluation plan</p>	<p>Capture data about indicators of success relevant to programming and instruction</p> <ul style="list-style-type: none"> • Examples: <ul style="list-style-type: none"> ○ Committed industry resources and consistent participation in initiative development and delivery ○ Demonstration that initiative learning objectives, curriculum, and instructional methodology are aligned with current and projected industry needs including knowledge, skills, and abilities (KSAs) and occupations ○ Demonstration that curriculum is engaging, informed by instructional best practices, and well-structured, allowing learners to apply, practice, and evaluate their knowledge and skills ○ Assessment of instructor effectiveness • Employ data collection methods from evaluation plan to collect relevant data • Implement data management and analysis plan outlined in evaluation plan
<p>Assess data quality</p>	<p>Ensure data is reliable, up-to-date, comprehensive, unbiased, and representative</p> <ul style="list-style-type: none"> • Identify data and data collection process errors and inaccuracies • Identify data gaps and plans to fill them
<p>Synthesize and analyze findings</p>	<p>Assess initiative effectiveness, and define and prioritize initiative changes that will better achieve initiative learning objectives</p>

ASSESSMENT QUESTION: To what extent did the initiative’s curriculum and instruction ensure learners achieved industry-defined learning objectives?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Qualitative evaluation of learner skills attainment</p> <ul style="list-style-type: none"> • Examples: self-assessment, instructor feedback <p>Qualitative data to demonstrate the effectiveness of initiative content, instruction, and delivery</p> <ul style="list-style-type: none"> • Collection examples: self-assessment, instructor feedback, instructor evaluation from students and peer instructors • Use of instructional best practices and credible sources (e.g., subject matter experts, information from trusted associations) • Instructional methods and assessments focused on skill application and performance • Recommendations to refine learning objectives, instructional methodology, assessments, and learning material <p>Clearly defined data collection, management, analysis, and reporting plan, including key stakeholders, methods, and frequency</p> <ul style="list-style-type: none"> • Clearly defined key performance indicators and benchmarks • Synthesis of evaluation, lessons learned, and next steps for improvement and continuation (e.g., understanding of ideal enrollment numbers for optimal outcomes) 	<p>Quantitative data and observation of skills attainment and knowledge retention by learners following the initiative</p> <ul style="list-style-type: none"> • Examples: performance-based assessments and credential attainment, job placement rates, reduced employee time to contribution, improved employee performance, time to promotion <p>Clearly articulated mechanism and defined frequency for ongoing feedback to inform initiative improvements and ensure alignment with current and projected industry needs</p> <ul style="list-style-type: none"> • Advisory board of industry and accredited instructors informing feedback on curriculum



Effective Business Processes

Support initiative success through sound operational planning and practices

ACTIVITY: Demonstrate business case for sustainment — Collect and outline evidence of value to justify continuation of the initiative

CONSIDERATIONS & GUIDANCE

<p>Provide evidence of impact and industry support</p>	<p>Assess participant outcomes (e.g., job placements, skills gained, wage growth), employer value (e.g., hiring rates of initiative participants, reduced turnover or training costs), system-level outcomes (e.g., alignment with workforce priorities, economic impact), and strategic partnerships</p>
<p>Assess financial stability and sustainability</p>	<p>Consider initiative cost effectiveness (e.g., cost per participant), training provider return on investment, future savings for employers, affordability for learners, and long-term funding strategy</p>
<p>Demonstrate logistical viability and longevity</p>	<p>Consider infrastructure and capacity for scale (e.g., organizational readiness, resource modifications), scalability model (i.e., increased enrollment, increased frequency, or growth across regions), credibility and track record of initiative, and policy alignment (i.e., local, state, and/or federal priorities)</p>
<p>Update risk assessment</p>	<p>Based on pilot, update potential risks and associated mitigation strategies to ensure initiative success</p>

ASSESSMENT QUESTION: To what extent has the initiative’s pilot provided evidence of the initiative’s value to justify its continuation?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Qualitative information to justify initiative continuation:</p> <ul style="list-style-type: none"> • Demonstrated value to a variety of stakeholders (e.g., commitment to support initiative delivery and continuous improvement, confirmation of continued need) • Financial stability and logistical viability (e.g., new or continued funding secured; continued access to needed facilities, equipment, and materials; ability to secure instructional expertise and program support personnel; cost per participant compared with target and available resources; actual enrolled participants compared with target enrollment) 	<p>Quantitative and more robust qualitative information to justify initiative continuation:</p> <ul style="list-style-type: none"> • Proof of economic impact (e.g., participant employment outcomes, economic mobility, training provider / funder return on investment, business impact, economic output) • Assessment of continued market need (e.g., current and anticipated unfilled positions for specific jobs and/or knowledge, skills, and abilities (KSAs); alignment with regional and/or national priorities) • Continued/increased stakeholder commitment and associated resources (e.g., number of new or renewed funders, inclusion in organizational strategy and priorities)

ACTIVITY: Refine planning for initiative sustainment — Synthesize lessons learned to define and prioritize recommendations for initiative improvement that will enable initiative sustainment, growth, and/or scaling

CONSIDERATIONS & GUIDANCE

<p>Refine initiative operational goals and milestones</p>	<p>Consider:</p> <ul style="list-style-type: none"> • Frequency of initiative • Enrollment goals • Budget requirements and expected revenue over time, if applicable • Plans for initiative sustainment and/or scale-up
<p>Develop recommendations for curriculum updates</p>	<p>Consider needed changes to learning objectives, instructional methodology, assessments, and learning material</p> <ul style="list-style-type: none"> • Validate recommended changes with industry
<p>Refine operational plan, including resource needs</p>	<p>Assess current capacity and tasking, including staffing, partnerships, facilities and equipment, funding; and define key needs and outcomes for initiative sustainment</p> <ul style="list-style-type: none"> • Build a multi-year financial sustainability plan, including estimated ongoing costs, revenue strategy, accounting practices, and scenario planning (e.g., best-case vs. lean-year budgets) • Identify risks and create contingency plans; consider building flexible systems that allow for scaling up or down in response to industry need and available resources
<p>Refine communications plan</p>	<p>Consider needed changes to audience analysis, content strategy, and implementation plan (e.g., outreach channels, geographic areas)</p>
<p>Refine evaluation plan</p>	<ul style="list-style-type: none"> • Consider needed changes to contributing stakeholders; indicators of success; evaluation logistics; and data management, analysis, and reporting plans • Continuously communicate impact metrics to stakeholders and decision makers • Identify barriers to collecting longitudinal data from employers and develop strategies to improve access

ASSESSMENT QUESTION: To what extent do your initiative’s refined business plans demonstrate your ability to successfully sustain, grow, or scale the initiative (if applicable)?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Refined goals, milestones, roles and responsibilities, and associated resource requirements</p> <ul style="list-style-type: none"> • Refined frequency of initiative, enrollment targets, and cost per participant • Internal processes, including logistics, data management, and risk management • Budget and plan for needed resources (e.g., funding, human resources, equipment and facility access, instructional technology) • Updated risk assessment and mitigation plans (e.g., operational, financial, market) <p>Refined communications plan informed by key performance indicators (e.g., engagement, referrals)</p> <ul style="list-style-type: none"> • Updated messages and content tailored to target audiences and outreach channels • Assessment of engagement analytics and mechanisms for ongoing monitoring <p>Demonstrated capture and communication of findings from initiative evaluation across dimensions of impact (i.e., Industry & Partner ROI, Learner Impact, Programming & Instruction, Effective Business Processes)</p> <ul style="list-style-type: none"> • Continuous communication of impact metrics to stakeholders and decision makers • Refined evaluation plan with updated data collection, management, analysis, and reporting approaches 	<p>Consultation of key stakeholders on recommendations and changes to initiative</p> <ul style="list-style-type: none"> • Recommendations are prioritized by greatest potential impact and responsiveness to industry, learner, and funder needs; sound rationale is provided for not implementing certain recommendations • Plans for obtaining longitudinal data from industry on participant employment/performance • Continued/increased stakeholder involvement and commitment (e.g., industry support, participant continued engagement, needed changes to contributing stakeholders) <p>Multi-year strategies for needed resources and stakeholder engagement</p> <ul style="list-style-type: none"> • Funding models: revenue-generating model, ability to financially sustain itself without continued grants, diversified funding sources • Equipment, technology, and facility re-evaluation (e.g., contracts, maintenance plans, upgrades) • Succession and knowledge transfer planning for instructional and programmatic personnel

SUSTAIN

Continuously evaluate and improve initiative to maximize its impact

Sustain an initiative: Continue to follow business and operational model with new cohorts

Grow an initiative: Increase learner enrollment and/or initiative frequency at the same location/region

Scale an initiative: Replicate the initiative for new geographies (i.e., new locations) and/or new target audiences (i.e., new populations)

Activities by Dimension of Impact

	<p>Industry & Partner ROI</p>	<p>Maintain and expand industry champions</p> <p>Continue to collect and communicate data related to industry-relevant metrics</p>
	<p>Learner Impact</p>	<p>Maintain and/or grow enrollment</p> <p>Continue to collect and communicate data related to learner impact metrics</p>
	<p>Programming & Instruction</p>	<p>Continue to collect and analyze data related to programming and instruction metrics</p> <p>Continuously update and vet refined curriculum and instructional resources</p>
	<p>Effective Business Processes</p>	<p>Continuously refine and evolve planning for initiative sustainment</p> <p>Develop a growth and/or scaling plan</p>



Industry & Partner ROI

Align initiative with current and/or projected workforce needs

ACTIVITY: Maintain and expand industry champions — Continue to communicate the initiative’s value to industry and work with industry to continuously refine and secure resources needed for initiative sustainment, growth, and/or scaling

CONSIDERATIONS & GUIDANCE

<p>Maintain engagement with key industry influencers, decision-makers, and subject matter experts</p>	<p>Ensure champions continue to value and support the initiative</p> <ul style="list-style-type: none"> • Be mindful of industry representative turnover: Maintain materials and processes to facilitate knowledge transfer and more quickly get new representatives up to speed on the initiative • Invest in relationships by offering routine engagement opportunities and providing personalized outreach
<p>Grow the circle of initiative champions</p>	<p>Build relationships needed to expand the initiative’s recognition and impact</p> <ul style="list-style-type: none"> • Identify gaps in current industry champions that should be addressed to broaden the initiative’s reach and success, including: <ul style="list-style-type: none"> ○ Type of stakeholders (e.g., industry, community-based organizations, economic development organizations, unions, sector partnerships, consortia) ○ Organization size and geographic location ○ Job/role/functional area of stakeholders (e.g., corporate leadership, site managers, front-line manufacturing managers, HR managers, hiring managers, talent acquisition specialists, industry association leaders, subject matter experts) • Build relationships with organizations similar to current champions, trade and professional associations, and community organizations • Potential mechanisms: leveraging existing champions for connections, general networking, hosting roundtables, and presenting at industry events
<p>Provide ongoing mechanisms for industry feedback and collaboration</p>	<p>Collect regular industry feedback (e.g., through advisory boards or curriculum/assessment reviews, new training modules, reviewing prospective participant applications)</p>

- Ensure continued value for champions by helping employers meet their own goals (e.g., talent pipeline, public relations) and adjusting in response to evolving workforce needs and market factors (e.g., economic fluctuations, labor market policy)
- Continuously engage industry to define the considerations for long-term industry support (e.g., needed initiative improvements, resource commitments, advisory board participation, enrollment expectations, and hiring practices in alignment with the initiative)

ASSESSMENT QUESTION: To what extent has industry demonstrated a continued commitment to support the initiative’s sustainment, growth, and/or scaling?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Continued and/or expanded in-kind industry support</p> <ul style="list-style-type: none"> • Examples of support: participation in subject matter reviews, advisory board participation, initiative delivery and instruction, marketing and outreach support, industry engagement with candidates, initiative feedback to inform continuous improvement • Demonstrated industry and organizational support, even with point of contact turnover 	<p>Continued and/or expanded committed stakeholder resources beyond time</p> <ul style="list-style-type: none"> • Examples of support: funding, access to facilities and equipment for experiential learning opportunities, commitments to drive enrollment and participant hiring, addition of initiative to preferred hiring requirements • Broader stakeholder commitment, dependent on initiative scope (e.g., engaged industry decision makers and/or a greater number of industry organizations, trade and professional associations, and community organizations) • Industry remains committed to hire participants, with competitive wages and career pathways <p>Clearly articulated mechanism and defined frequency for ongoing feedback to inform initiative improvements and ensure alignment with current and projected industry needs</p>

ACTIVITY: Continue to collect and communicate data related to industry-relevant metrics — Continue to collect data needed to evaluate the initiative’s alignment with industry needs, and communicate results to inform initiative improvements and grow industry support and recognition of the initiative

CONSIDERATIONS & GUIDANCE

<p>Execute on refined evaluation plan</p>	<p>Capture data about indicators of success relevant to industry</p> <ul style="list-style-type: none"> • Examples: <ul style="list-style-type: none"> ○ Demonstration of increased participant skill and performance, reduced internal training, reduced time to hire, and/or reduced employee time to contribution ○ Participants trained per year ○ Representative industry stakeholder engagement ○ Alignment with industry market data, including occupations, current and anticipated positions to fill, and needed knowledge, skills, and abilities (KSAs) ○ Resources committed compared with value realized • Employ data collection methods from evaluation plan to collect relevant data at defined data collection frequency, including from industry partners and initiative learners • Implement data management and analysis plan outlined in evaluation plan
<p>Assess data quality</p>	<p>Ensure data is reliable, up-to-date, comprehensive, unbiased, and representative</p> <ul style="list-style-type: none"> • Identify data and data collection process errors and inaccuracies • Identify data gaps and plans to fill them
<p>Synthesize and communicate findings</p>	<p>Leverage communications plan to align available data with key messages to demonstrate the industry value proposition</p> <ul style="list-style-type: none"> • Update and prioritize initiative changes that will better align the initiative with industry needs

ASSESSMENT QUESTION: To what extent does the initiative continue to provide return on investment to industry?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Qualitative positive feedback (e.g., testimonials) from industry that demonstrates industry’s perceived value of the initiative</p> <ul style="list-style-type: none"> • Examples: reduction in unfilled positions or time to fill, more qualified candidates, reduced employee time to contribution, improved employee performance <p>Demonstrated implementation of data collection, management, analysis, and reporting plan, including key stakeholders, methods, and frequency</p> <ul style="list-style-type: none"> • Clearly defined key performance indicators and benchmarks 	<p>Quantitative data from industry that demonstrates industry’s sustained value from the initiative over time</p> <ul style="list-style-type: none"> • Alignment with industry market data, including occupations, current and anticipated positions to fill; demonstrated contributions to industry success and growth (e.g., regional expansion) • Data comparisons of initiative participants with similar groups who did not participate • Examples: number of initiative participants that industry interviews, hires, or promotes; reduction in unfilled positions or time to fill; reduced employee time to contribution; longitudinal improved employee performance and retention; time to promotion; skills competency scores <p>Multiple methods used for collecting and reporting data on initiative impact</p> <ul style="list-style-type: none"> • Collection examples: survey/feedback forms, interview, roundtable, focus group • Reporting examples: Industry case studies and testimonials that can be used in future initiative marketing and communications



Learner Impact

Enhance learner skill marketability and career opportunities

ACTIVITY: Maintain and/or grow enrollment — Continue to conduct and update outreach efforts to target learner audience to sustain or grow enrollment of participants in the initiative

CONSIDERATIONS & GUIDANCE

<p>Execute and refine communications plan for target learner audience</p>	<p>Continue to use identified outreach channels to message initiative details and value proposition to prospective participants, communicating a clear call to action and intuitive enrollment process in all materials</p> <ul style="list-style-type: none"> • Coordinate with relevant recruitment partners, including industry employers and community-based organizations, to promote the initiative to the target learner audience <p>Identify outreach successes and potential areas for improvement</p> <ul style="list-style-type: none"> • Track and analyze enrollment patterns: Use data to spot trends (e.g., successful outreach channels, drop-offs, demographic or geographic disparities) • Assess and refine messaging and outreach strategy: Messaging should be clear, outcome-focused, relevant, and aspirational; include participant case studies and testimonials • Use feedback to continuously improve: Incorporate feedback collected through evaluation methods
<p>Continue to support prospective participants during the enrollment process</p>	<p>Continue to work with learners to navigate the enrollment process, including answering any questions and addressing any concerns, communicating logistical information, and providing any preparatory or background materials</p> <ul style="list-style-type: none"> • Identify any potential opportunities for participation support (e.g., scholarships and financial assistance, available support services at sponsoring academic institution [e.g., transportation, childcare]) • Reduce friction in the enrollment process where possible by streamlining intake forms, offering multiple ways to enroll, providing real-time help, and using reminders to reduce no-shows

Contact previous applicants or interested participants

Follow-up and re-engage interested target learners to notify them of additional initiative opportunities (e.g., offer waitlists or early application; maintain leads through text messages, newsletters, or alumni success stories)

ASSESSMENT QUESTION: To what extent is the initiative able to sustain and/or grow learner participation?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Qualitative assessment of target audience outreach strategy</p> <ul style="list-style-type: none"> Examples: how interested candidates heard about the initiative, why prospective learners were interested in participating, satisfaction of enrollment process <p>Enrollment metrics</p> <ul style="list-style-type: none"> Number of individuals who apply for and/or enroll in the initiative compared with enrollment targets <p>Qualitative demonstration of alignment between enrolled participant characteristics and target learner characteristics</p> <ul style="list-style-type: none"> Examples: geographical location, education level, employment status (i.e., currently working in life sciences vs. outside this sector), current and desired occupation and role 	<p>Quantitative demonstration and more robust qualitative alignment between enrolled participant characteristics and target learner characteristics</p> <ul style="list-style-type: none"> New and/or broader target audiences reached (e.g., students from new regions, different educational/vocational backgrounds) Example quantitative data: age, income, language Example qualitative information: background, motivations and goals, cultural or community influences <p>Ongoing quantitative assessment of target audience outreach strategy</p> <ul style="list-style-type: none"> Examples: social media and website engagement rates, email open rate, paid ad clicks, sign-up/attendance at promotional events, cost of marketing approaches compared with reach/enrollment Demonstrated mechanism for tracking and engaging with interested target learners who did not enroll / were not accepted

ACTIVITY: Continue to collect and communicate data related to learner impact metrics — Continue to collect data needed to evaluate learner engagement with the initiative and increased learner skill marketability

CONSIDERATIONS & GUIDANCE

<p>Execute on refined evaluation plan</p>	<p>Capture data about indicators of success relevant to learner impact</p> <ul style="list-style-type: none"> • Examples: registration/enrollment numbers; increased skill marketability, job opportunities and quality, promotion opportunities, compensation, job satisfaction, job performance, professional networks, career pathways, professional pride and motivation; willingness to refer other participants • Employ data collection methods from evaluation plan to collect relevant data at defined data collection frequency (e.g., 1 month following initiative, 6 months, 1 year, 2 years), including from industry partners and initiative learners • Implement data management and analysis plan outlined in evaluation plan
<p>Assess data quality</p>	<p>Ensure data is reliable, up-to-date, comprehensive, unbiased, and representative</p> <ul style="list-style-type: none"> • Identify data and data collection process errors and inaccuracies • Identify data gaps and plans to fill them
<p>Identify and capture learner case studies</p>	<p>When collecting data from participants, identify learners with compelling success stories or testimonials that could help demonstrate the value of the initiative to future prospective learners</p>
<p>Synthesize and communicate findings</p>	<p>Leverage communications plan to align available data with key messages to demonstrate the learner value proposition</p> <ul style="list-style-type: none"> • Update and prioritize initiative changes that will better align the initiative with learner needs

ASSESSMENT QUESTION: To what extent does the initiative continue to successfully engage learners and deliver a return on investment for participants?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Qualitative positive feedback from learners that demonstrates their engagement in and perceived value of the initiative</p> <ul style="list-style-type: none"> Engagement examples: participant completion rates, drop-off points and reason, frequency or duration of engagement, time to complete initiative, willingness to refer Value examples: extent of industry-relevant instruction and assessment, increased skill marketability, job opportunities and quality, promotion opportunities, compensation, job satisfaction, job performance, professional networks, career pathways, professional pride and motivation, long-term access to initiative materials <p>Demonstrated implementation of data collection, management, analysis, and reporting plan, including key stakeholders, methods, and frequency</p> <ul style="list-style-type: none"> Clearly defined key performance indicators and benchmarks 	<p>Quantitative data from learners that demonstrates their increased skill marketability and application over time</p> <ul style="list-style-type: none"> Examples: interviews secured, job placement rates, promotions attained post-initiative, credential attainment or skills demonstration through performance-based assessments, education/career progression, employment persistence, earnings growth Past participant champions (e.g., guest speakers, mentors, review of and feedback on initiative materials) <p>Multiple methods used for collecting and reporting data</p> <ul style="list-style-type: none"> Collection examples: participation/engagement tracking, self-reflection tools, survey/feedback forms, interview, roundtable, focus group Reporting examples: learner case studies and testimonials that can be used in future initiative marketing and communications



Programming & Instruction

Apply best practices to optimize initiative delivery and instructional effectiveness

ACTIVITY: Continue to collect and analyze data related to programming and instruction metrics — Refine curriculum and initiative logistics to ensure participants continue to reach industry-aligned learning objectives

CONSIDERATIONS & GUIDANCE

Execute on refined evaluation plan	<p>Capture data about indicators of success relevant to programming and instruction</p> <ul style="list-style-type: none"> • Examples: <ul style="list-style-type: none"> ○ Committed industry resources and consistent participation in initiative development and delivery ○ Demonstration that initiative learning objectives, curriculum, and instructional methodology are aligned with current and projected industry needs including knowledge, skills, and abilities (KSAs) and occupations ○ Demonstration that curriculum is engaging, informed by instructional best practices, and well-structured, allowing learners to apply, practice, and evaluate their knowledge and skills ○ Assessment of instructor effectiveness • Employ data collection methods from evaluation plan to collect relevant data • Implement data management and analysis plan outlined in evaluation plan
Assess data quality	<p>Ensure data is reliable, up-to-date, comprehensive, unbiased, and representative</p> <ul style="list-style-type: none"> • Identify data and data collection process errors and inaccuracies • Identify data gaps and plans to fill them
Synthesize and analyze findings	<p>Assess initiative effectiveness, and define and prioritize initiative changes that will better achieve initiative learning objectives</p>

ASSESSMENT QUESTION: To what extent do curriculum and training materials continue to align with current and emerging industry needs and target learner characteristics?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Qualitative evaluation of learner skills attainment</p> <ul style="list-style-type: none"> • Examples: self-assessment, instructor feedback <p>Qualitative data to demonstrate the effectiveness of initiative content, instruction, and delivery</p> <ul style="list-style-type: none"> • Collection examples: self-assessment, instructor feedback, instructor evaluation from students and peer instructors • Use of instructional best practices and credible sources (e.g., subject matter experts, information from trusted associations) • Instructional methods and assessments focused on skill application and performance • Recommendations to refine learning objectives, instructional methodology, assessments, and learning material <p>Demonstrated implementation of data collection, management, analysis, and reporting plan, including key stakeholders, methods, and frequency</p> <ul style="list-style-type: none"> • Clearly defined key performance indicators and benchmarks • Synthesis of evaluation, lessons learned, and next steps for improvement and continuation (e.g., understanding of ideal enrollment numbers for optimal outcomes) 	<p>Quantitative data and observation of skills attainment and knowledge retainment by learners following the initiative</p> <ul style="list-style-type: none"> • Examples: performance-based assessments and credential attainment, job placement rates, reduced employee time to contribution, improved employee performance, time to promotion <p>Clearly articulated mechanism and defined frequency for ongoing feedback to inform initiative improvements and ensure alignment with current and projected industry needs</p> <ul style="list-style-type: none"> • Advisory board of industry and accredited instructors informing feedback on curriculum

ACTIVITY: Continuously update and vet refined curriculum and instructional resources — Continue to evaluate refined initiative curriculum, materials, assessments, and delivery effectiveness to ensure they are accurate, relevant, effective, and aligned with industry and learner needs

CONSIDERATIONS & GUIDANCE

<p>Develop and implement a curriculum/assessment review cycle</p>	<p>Regularly seek feedback from instructors, industry partners, former learners, and instructional designers</p> <ul style="list-style-type: none"> • Collect feedback from instructors and learners to identify gaps and challenges in programming and determine actionable insights for improvement • Review instructional materials and technology for relevance and quality: Ensure learning materials/curricula remain up to date and aligned with evolving workforce needs by continuing engagement with industry • Prioritize and integrate feedback, using data to inform prioritization • Continuously engage industry stakeholders to ensure learning objectives, curriculum, and instructional resources remain aligned with industry needs and priorities
<p>Coordinate resources and logistics to execute instructional plan</p>	<p>Leverage initiative operational plan around:</p> <ul style="list-style-type: none"> • Human resources, including engagement with and onboarding of instructors, participants, and other program and instructional staff support; knowledge transfer and succession planning • Equipment and facilities, including access to and scheduling of lab equipment, setup of lab or classroom training space, organization of instructional materials and supplies • Instructional technology setup, including software, platforms, hardware, and physical instructional materials (e.g., notebooks, handouts)
<p>Update and implement risk mitigation and contingency plans as needed</p>	<p>Monitor resources and make any real-time adjustments to improve the learner experience and ensure training initiative alignment with initiative operational plan</p>

ASSESSMENT QUESTION: To what extent do the initiative’s curriculum and instruction continue to effectively contribute to achieving industry-defined learning objectives?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Demonstrated alignment of revised training materials, curriculum, and/or assessment with current and emerging industry needs and target learner characteristics</p> <ul style="list-style-type: none"> • Refined in-depth mapping (e.g., logic model) of needed KSAs to learning objectives, initiative outputs, and corresponding job roles and occupations • Informal industry engagement (e.g., small-scale surveys and interviews, material mark-up) to review refined initiative materials, curriculum, and/or assessments <p>Demonstrated quality of refined initiative content and instructional materials</p> <ul style="list-style-type: none"> • Leverages instructional best practices and credible sources (e.g., subject matter experts, information from trusted associations) • Instructional methods and assessments focused on skill proficiency and performance • Clear and demonstrated plan for instructor evaluation, succession, and knowledge transfer 	<p>Integration of industry-relevant instruction and assessment, such as:</p> <ul style="list-style-type: none"> • Industry-relevant context for job roles and responsibilities (e.g., real-world operation and environments) • Hands-on, experiential learning • Demonstration-based assessment of skill performance • Use of rigorous, evidence-based instructional practices • Alignment with regionally or nationally recognized standards • Integration of relevant business and leadership skills • Professional development plans for instructors to ensure quality instructional delivery aligned with current and emerging industry needs <p>Clearly articulated mechanism and defined frequency for ongoing feedback to inform initiative improvements and ensure alignment with current and projected industry needs</p> <ul style="list-style-type: none"> • Advisory board of industry and accredited instructors informing feedback on curriculum • Engagement from employees who have recently attained the target KSAs and/or their employers



Effective Business Processes

Support initiative success through sound operational planning and practices

ACTIVITY: Continuously refine and evolve planning for initiative sustainment — Continuously assess—at least annually—the success of the initiative in meeting industry needs and implement prioritized recommendations for initiative improvements that will enable continued sustainment

CONSIDERATIONS & GUIDANCE

<p>Continue to refine business case for sustainment</p>	<p>Provide frequent evidence of impact and industry support, including participant outcomes (e.g., job placements, skills gained, wage growth), employer value (e.g., hiring rates of initiative participants, reduced turnover or training costs), system-level outcomes (e.g., alignment with workforce priorities, economic impact), and strategic partnerships</p> <ul style="list-style-type: none"> • Continuously assess financial stability and sustainability, including initiative cost effectiveness (e.g., cost per participant), training provider return on investment, future savings for employers, affordability for learners, and long-term funding strategy • Demonstrate logistical viability and longevity, including infrastructure and capacity for scale (e.g., organizational readiness, resource modifications), scalability model (i.e., increased enrollment, increased frequency, or growth across regions), credibility and track record of initiative, and policy alignment (i.e., local, state, and/or federal priorities)
<p>Refine initiative operational goals and milestones</p>	<p>Reassess and/or confirm:</p> <ul style="list-style-type: none"> • Frequency of initiative • Enrollment goals • Budget requirements and expected revenue over time, if applicable • Plans for continued sustainment, growth, and/or scale-up in response to industry need and learner demand

<p>Refine operational plan, including resource needs</p>	<p>Assess current capacity and tasking, including staffing, partnerships, facilities and equipment, and funding; define key needs and outcomes for initiative sustainment</p> <ul style="list-style-type: none"> • Update financial sustainability plan, including estimated ongoing costs, revenue strategy, accounting practices, and scenario planning (e.g., best-case vs. lean-year budgets) • Update risks and create contingency plans; consider building flexible systems that allow for scaling up or down in response to industry need and available resources
<p>Refine communications plan</p>	<p>Consider needed changes to audience analysis, content strategy, and implementation plan (e.g., outreach channels, geographic areas)</p>
<p>Refine evaluation plan</p>	<ul style="list-style-type: none"> • Consider needed changes to contributing stakeholders; indicators of success; evaluation logistics; and data management analysis and reporting plans • Continuously communicate impact metrics to stakeholders and decision makers • Identify barriers to collecting longitudinal data from employers and develop strategies to improve access

ASSESSMENT QUESTION: To what extent are your initiative’s business plans refined to support evolving industry needs and the business case for initiative continuation?

<p>BASELINE MEASURES</p>	<p>EXEMPLARY MEASURES</p>
<p>Demonstrated capture and communication of findings from initiative evaluation across dimensions of impact (i.e., Industry & Partner ROI, Learner Impact, Programming & Instruction, Effective Business Processes)</p> <ul style="list-style-type: none"> • Proof of economic impact (e.g., employment outcomes, economic mobility, return on investment (ROI), business impact, economic output) • Continuously communicate impact metrics to stakeholders and decision makers • Refined evaluation plan with updated data collection, management, analysis, and reporting approaches 	<p>Demonstration of operational and logistical maturity</p> <ul style="list-style-type: none"> • Demonstration of initiative scope alignment with market need: frequency and enrollment targets align with job openings and projected needs, ensuring ROI for both industry and learners • Increased and/or expanded stakeholder buy-in (e.g., increased funding, resources, and support from within organization; continued engagement and participation from initiative alumni) • Demonstration of thought leadership and expertise (e.g., participation in regional

<p>Demonstration of continued operational and logistical viability</p> <ul style="list-style-type: none"> Continued and/or expanded support from own organization Refined goals, milestones, roles and responsibilities, and associated resource requirements Refined frequency of initiative, enrollment targets, and cost per participant Repeatable internal processes, including logistics, data management, and risk management Refined budget and plan for needed resources (e.g., funding, human resources, equipment and facility access, instructional technology) Updated risk assessment and mitigation plans (e.g., operational, financial, market) <p>Refined communications plan informed by key performance indicators (e.g., engagement, referrals)</p> <ul style="list-style-type: none"> Updated messages and content tailored to target audiences and outreach channels Assessment of engagement analytics and mechanisms for ongoing monitoring 	<p>workforce boards and initiatives, sought-after best practices and experience)</p> <ul style="list-style-type: none"> Demonstrated integration and partnership with the broader community (e.g., wraparound services, connections with community organizations, mentorship, partnerships with training providers across biomanufacturing career pathways) <p>Consultation of key stakeholders on recommendations and changes to initiative</p> <ul style="list-style-type: none"> Recommendations are prioritized by greatest potential impact and responsiveness to industry, learner, and funder needs; sound rationale is provided for not implementing certain recommendations Receipt of and plans for continuing to obtain longitudinal data from industry on participant employment/performance Continued/increased stakeholder involvement and commitment (e.g., industry support, participant continued engagement, needed changes to contributing stakeholders) <p>Multi-year strategies for needed resources and stakeholder engagement</p> <ul style="list-style-type: none"> Institutional capabilities and infrastructure for securing additional funding (e.g., grant application and management) Funding models: revenue-generating model, ability to financially sustain itself without continued grants, diversified funding sources Equipment, technology, and facility re-evaluation (e.g., contracts, maintenance plans, upgrades) Succession and knowledge transfer planning for instructional and programmatic personnel
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ACTIVITY: Develop a growth and/or scaling plan — Define the business case for initiative growth and/or scaling and refine initiative objectives and plans

CONSIDERATIONS & GUIDANCE

<p>Define levels of desired growth and/or identify opportunities to scale the initiative</p>	<p>Leverage landscape analyses, industry partner recommendations, funding opportunities, etc. to define and justify strategy</p> <ul style="list-style-type: none"> • Growth is an increase in enrollment of target audiences at the same location • Scale is replicating the initiative for new geographies (i.e., new locations) or new target audiences (i.e., new populations)
<p>Demonstrate business case for growth and/or scaling</p>	<p>Collect and outline evidence of value and readiness to scale to justify expansion of the initiative</p> <ul style="list-style-type: none"> • Provide evidence of impact and industry support, including participant outcomes (e.g., job placements, skills gained, wage growth), employer value (e.g., hiring rates of initiative participants, reduced turnover or training costs), system-level outcomes (e.g., alignment with workforce priorities, economic impact), and strategic partnerships • Assess financial stability and sustainability, including initiative cost effectiveness (e.g., cost per participant), training provider return on investment, future savings for employers, affordability for learners, and long-term funding strategy • Demonstrate logistical viability and longevity, including infrastructure and capacity for scale (e.g., organizational readiness, resource modifications), scalability model (i.e., increased enrollment, increased frequency, or growth across regions), credibility and track record of initiative, and policy alignment (i.e., local, state, and/or federal priorities) • Update risk assessment: update potential risks and associated mitigation strategies to ensure initiative success
<p>Revisit Plan, Develop, and Pilot phases of initiative development</p>	<p>Refine operational goals and milestones, operational plan (including resource needs), communications plan, and evaluation plan to reflect growth and/or scaling opportunities and business case</p>

ASSESSMENT QUESTION: To what extent does the growth or scaling plan demonstrate a business case and availability of adequate resources for growing or scaling the initiative?

BASELINE MEASURES	EXEMPLARY MEASURES
<p>Qualitative information to justify initiative growth and/or scaling business case:</p> <ul style="list-style-type: none"> • Updated targets for growth/scaling, including geography; defined knowledge, skills, and abilities (KSAs) and relevant occupations (including volume), and target learner audience and characteristics • Demonstrated value to a variety of stakeholders (e.g., commitment to support initiative delivery and continuous improvement, confirmation of continued and expanded market need) • Financial stability and logistical viability (e.g., continued and expanded access to needed facilities, equipment, and materials; ability to secure additional instructional expertise and program support personnel; repeatable and scalable internal processes, including logistics, data management, and risk management) <p>Refined operational goals and milestones, operational plan (including resource needs), communications plan, and evaluation plan in alignment with growth and/or scaling business case</p>	<p>Quantitative and more robust qualitative information to justify initiative growth and/or scaling business case:</p> <ul style="list-style-type: none"> • Proof of economic impact of current initiative and projected expanded impact from growth or scaling (e.g., employment outcomes, economic mobility, return on investment, business impact, economic output) • Assessment of expanded market need (e.g., current and anticipated unfilled positions for specific jobs and/or KSAs; alignment with regional and/or national priorities) • Continued/increased stakeholder commitment and associated resources (e.g., number of new or renewed funders, inclusion in organizational strategy and priorities)