

AMERICAN ACADEMY
OF ARTS & SCIENCES

**Advancing Skill Development and
Employment Outcomes for
Postsecondary Students**

December 18, 2025

Advancing Skill Development and Employment

Approaches to Help Students



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Apprenticeships

Internships

Project-Based Learning

Badges & Microcredentials

Competency-Based Education

Employer-Designed Curriculum

Career Coaching

Skills-First Hiring

Creation

How skills are taught

Validation

How skills are proven (credentials, portfolio)

Signaling

How skills are communicated to employers

Navigation

How students choose and sequence skills

Enablement

How to remove barriers to access

Additional approaches and pathways?

Advancing Skill Development and Employment

Today's Focus



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We seek to advance skill development and job entry for the vast numbers in the “some college” group.

“The Typical College Student Is Not Who You Think”

Among undergraduates...

- 20% are parents
- 9% are single mothers
- 25% live with their parents
- 43% attend community college
- 26% take classes exclusively online
- 33% received the Pell Grant
- 40% are older than 22
- 69% are holding down jobs
- 30% are first-generation
- 25% are immigrants
- 17% are neurodivergent

Blinder and Rich (2025)

Genio (2025) The New Majority Learner Report 2025

Advancing Skill Development and Employment

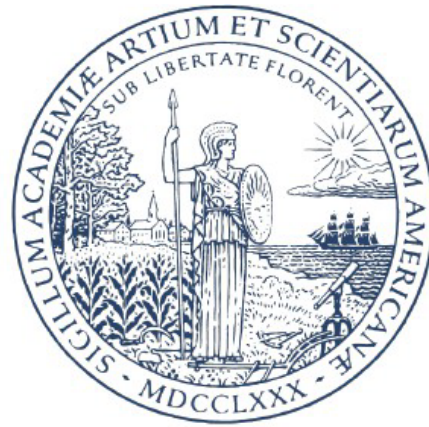
Today's Focus



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We seek to advance skill development and job entry for the vast numbers in the “some college” group.

- Many struggling students are **part-time, balancing work** and other commitments, and are navigating **disrupted patterns of enrollment**.
- Although there has been good work focused on options like work-based training, **additional pathways are needed**, especially for students making slow progress to a degree.
- We are in the midst of an increasingly **changing and uncertain labor market**, which only raises the stakes.
- The current funding environment is uncertain and under threat, which suggests the need to **leverage current assets and initiatives** and to consider **approaches that focus on changing how we work**, including bolstering partnerships



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Advancing the Skills Conversation

*What Should Systems Prioritize to meet the
Needs of Employers?*

December 18, 2025

Advancing the Skills Conversation

Key Questions



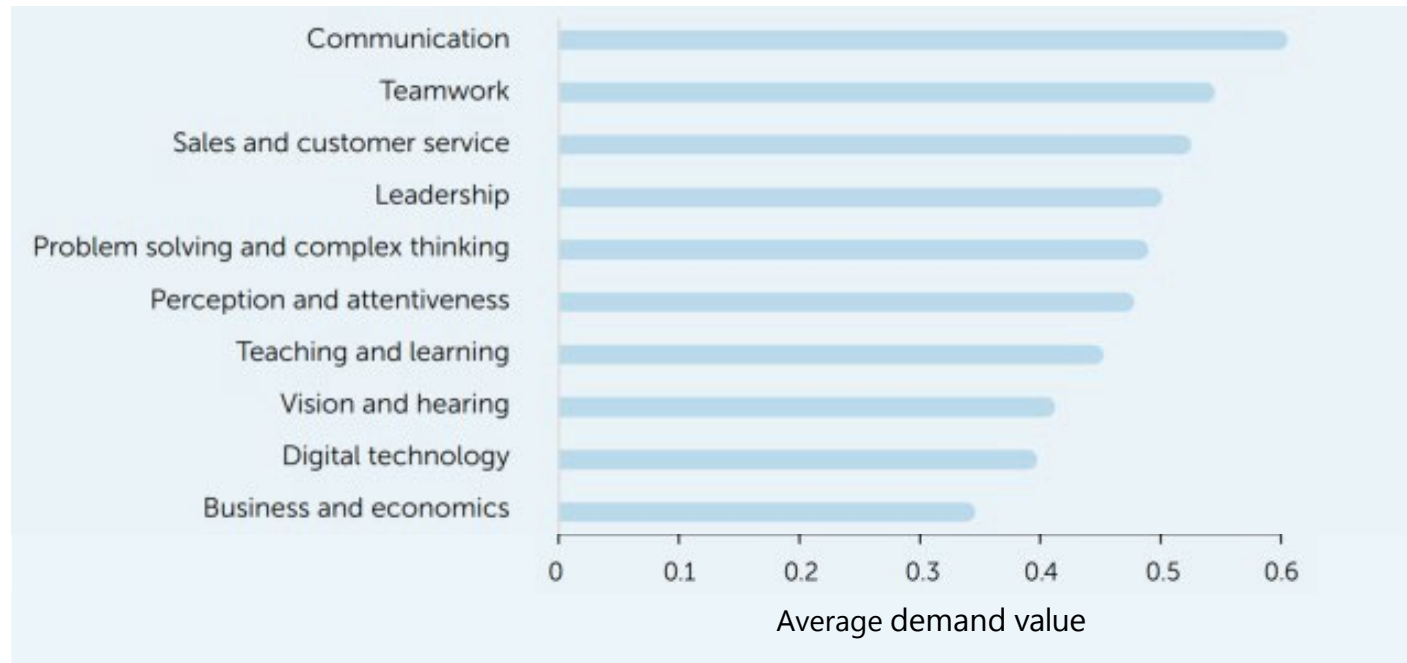
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*What should systems prioritize to meet the needs of employers?
Technical skills? Durable skills? Something else?*

Where is there agreement?

*What skills do we predict will be important five years from now (i.e.,
due to changes in the labor market, including the growth of AI)?*

Prior to the pandemic, general cognitive skills were the most in-demand competencies across the labor market



Source: GUCEW, "Workplace Basics", 2020.

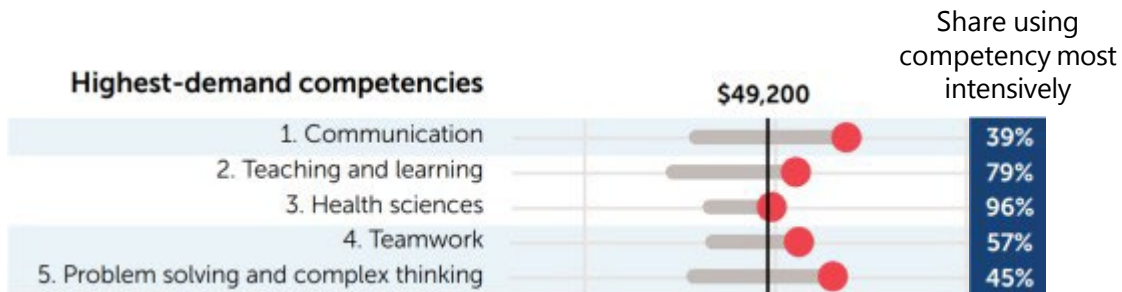
Competencies with the largest earnings premia are not always in highest demand



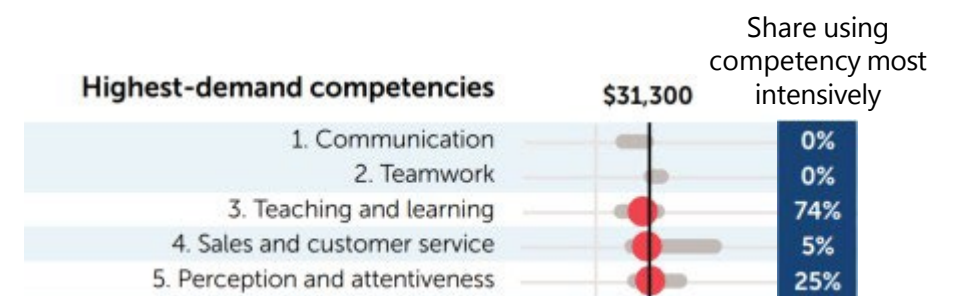
Source: GUCEW, "Workplace Basics", 2020.

Demand for and returns to skills vary across occupations, even among those working in the same industry with similar education levels

Healthcare Professional & Technical Middle-skills Workforce

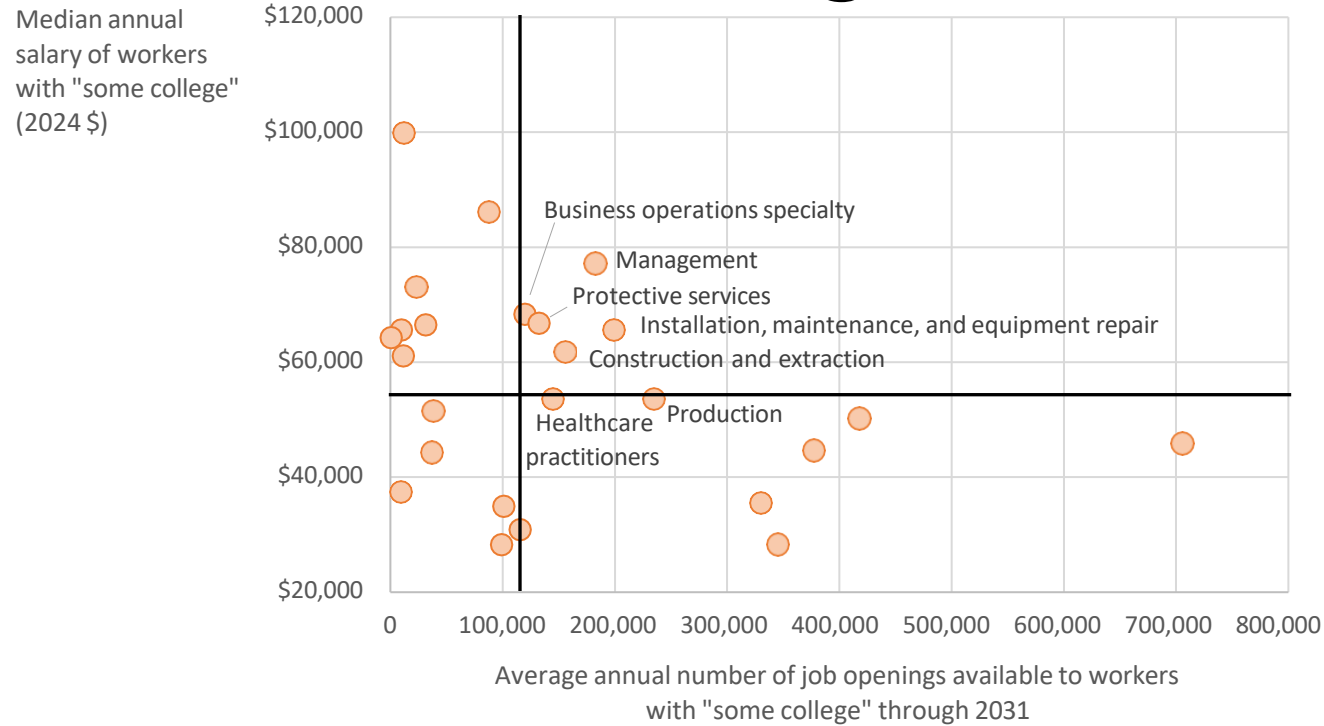


Healthcare Support Middle-skills Workforce



Source: GUCEW, "Workplace Basics", 2020.

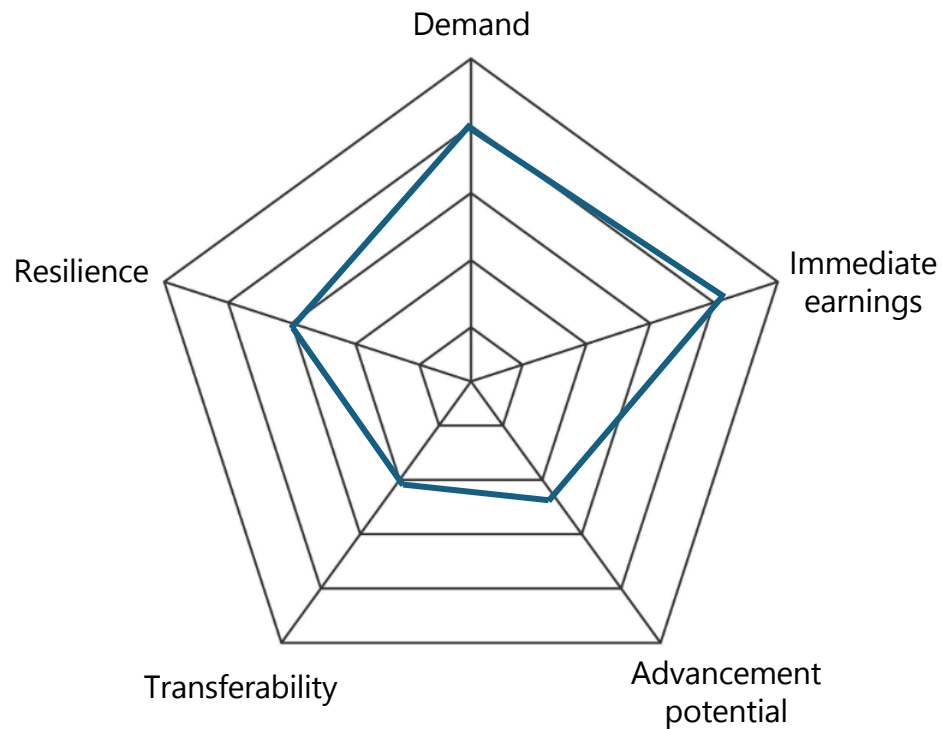
Skills to prioritize: start with those common to high-demand, high-pay jobs accessible to workers with "some college"?



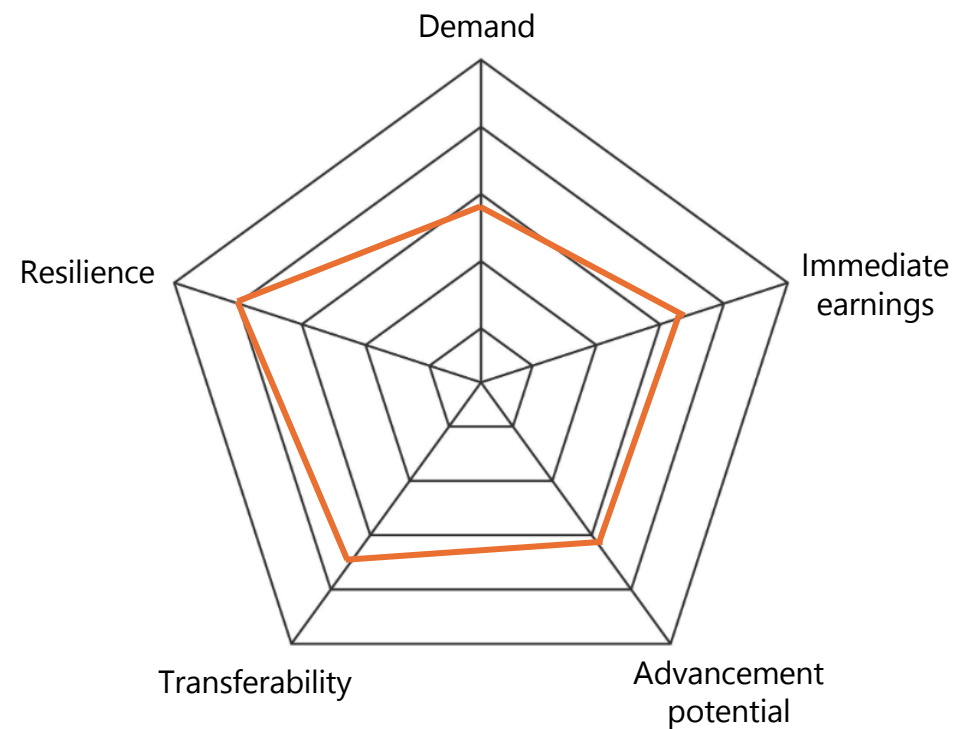
Sources: GUCEW, "After Everything", 2023; and US Census, American Community Survey, 2019-2023.

Considerations beyond near-term demand and pay

Competency A



Competency B





Advancing the Skills Conversation

Leslie Noggle

Senior Directors of Assessment & Psychometrics

Western Governor's University

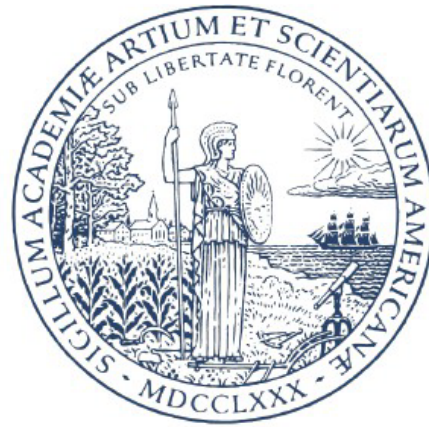


WGU Skills Architecture

Mapping curriculum to workforce needs

Meeting Employer Demand for Market-Relevant Skills

“The world is getting better at understanding the market for skills,” said Kozyrev. “With our business intelligence systems, we can accurately see growing demand or declines for very specific skill sets. This is also why, in addition to our skills mapping, we are working to create more modular content so that as any one aspect of our curriculum becomes dated or loses relevance, we can pull that out and plug in an aspect that has great and growing relevance.”



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Postsecondary Approaches to Workforce Training

December 18, 2025

Postsecondary Approaches to Workforce Training

Key Questions



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How can we leverage existing courses to improve students' ability to gain the skill necessary for meaningful employment?

What can we learn from current efforts to create skills pathways and microcredentials?

What opportunities might we prioritize for the future?

Given the growth in microcredentials, how can institutions maintain quality and coherence?

Postsecondary Approaches to Workforce Training

The Landscape



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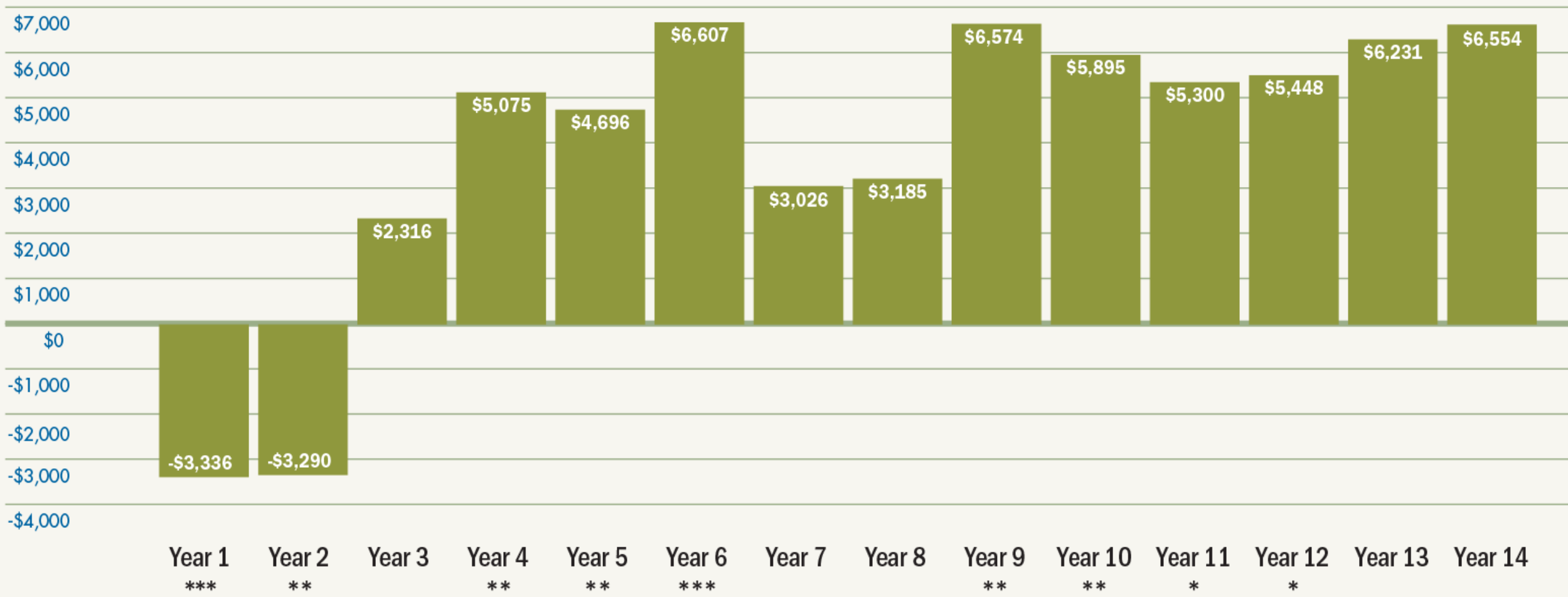
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American Academy of Arts & Sciences

MDRC

December 18, 2025

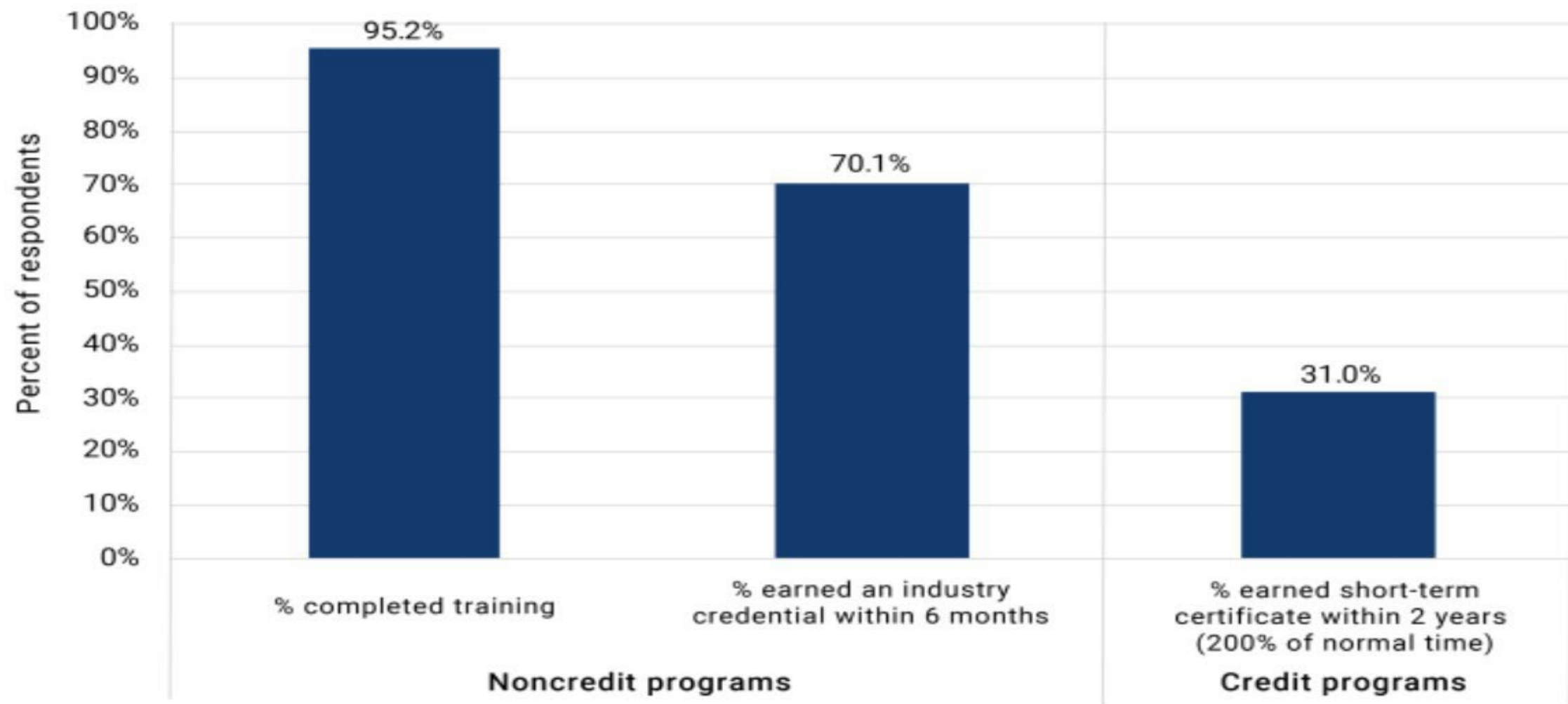
Project QUEST's Impact on Average Annual Earnings during Each of the 14 Years after Study Enrollment (N=410)



Note: Earnings impacts are reported in constant 2022 dollars and represent differences in average annual earnings between the QUEST treatment group and the control group in each year. Statistical significance levels: *** p<.01; ** p<.05; * p<.10

FIGURE 3

FastForward completion and industry credential rates of fall 2018-2019 cohorts



Fast Track

Lorain County Community College

- Continuously Offered, Short-Term Programs for College Credit
- Direct Pathways to Credentials of Value
- Stackable Credentials for Career Advancement
- Low-Cost Access and Financial Incentives
- High-Quality, Ongoing Advising



Bunker Hill Community College Skill Badge Program

Soo Park, Dean, Humanities and Learning Communities
Molly Phelps, Director, Humanities to Career Program



What is a Skill Badge?

- ✓ Employer-Validated Skills
- ✓ 3 Credit-bearing Courses + Workshop
- ✓ No Changes to Curriculum
- ✓ 100% Stackable



01

Employer context

Strong interest in durable skills

Increasingly relevant with growth of AI

02

Faculty context

Overstretched

May need additional support in connecting coursework to careers

03

Student context

Low transfer / retention rates

May need help bridging the gap between coursework and a career

Skill Badge Program Context



Employer Skill Needs Assessment

Us: What technical skills do our HLA grads need?

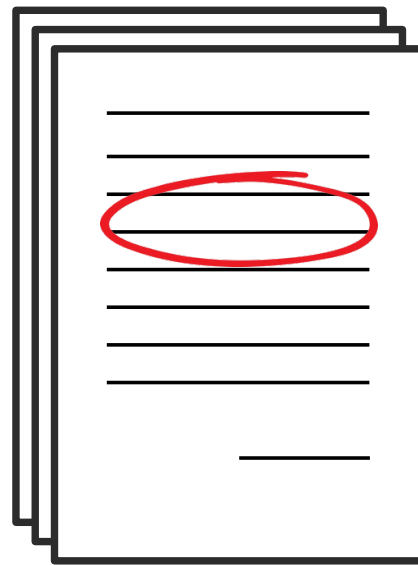
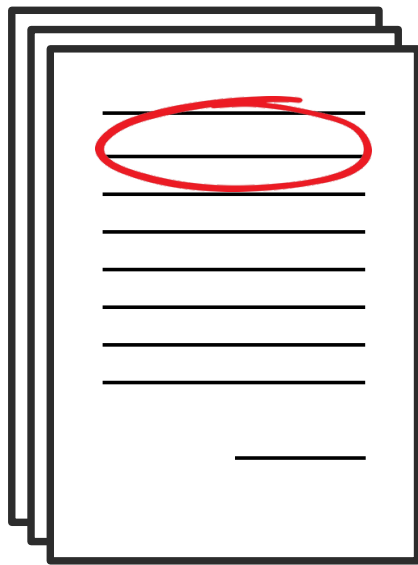
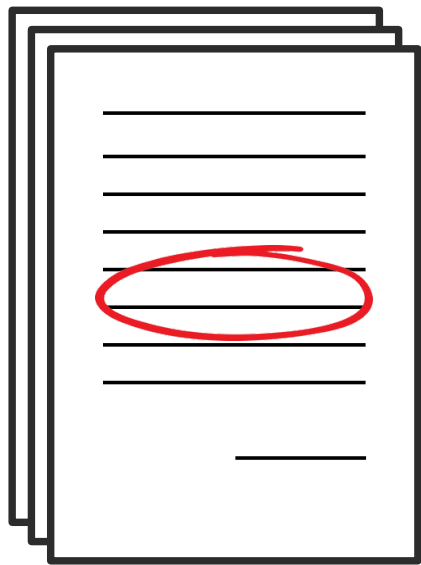
Them: We can teach the technical. Can you validate their durable skills?

Durable Skills identified by Employers

Category	Description	Skills Identified by Employers
Communication and Collaboration	Skills related to clearly conveying ideas, active engagement with others, and building relationships	Communication; Listening; Public Speaking; Giving and Receiving Feedback; Networking; Conflict Resolution
Self-Management and Adaptability	Skills focused on personal regulation, emotional intelligence, and navigating change	Emotional agility; Flexibility; Self-Advocacy; Time Management
Leadership and Influence	Skills connected to leading, inspiring, or organizing others	Managing Others; Self-Advocacy (also fits here); Giving and Receiving Feedback (also fits here)
Cognitive and Problem-Solving Skills	Skills involving analysis, creativity, and decision making	Critical Thinking; Solution-Oriented; Eager to Learn

Building a Skill Badge

Step 1: Review course outcomes and find common theme that connects to skills identified by Employers



Common Theme (Skill)

Example: Interpersonal Intelligence and Conflict Management



Building a Skill Badge

Step 2: Identify at least 3 current job openings for Associate Degree graduates that mention the selected skill (verifying industry relevance)

Interpersonal Intelligence and Conflict Management

- Mental Health Worker I, The Dr. John C. Corrigan Mental Health Center
- Community-Based Day Support Case Manager, Opportunities for Inclusion
- Community Health Navigator, Vinfen

Step 3: Bring the Employer Voice into the Process



Employer
Advisory
Board
reviews draft

Faculty edits
draft based
on Employer
feedback

Employers
write Skill
Validation
Letters

Faculty designs
workshop,
weaving in
Employer
examples from
Skill Validation
Letters

Employers
attend
workshop
and share
feedback
with students



Issuing Skill Badges to Students

- Practice “storytelling” with the skill (networking/interview contexts)
- Resume and cover letter language
- How to use the skill in career search
- Celebrating win toward degree

It's all about the **Skill**

**Performance
and Self
Promotion**

**Interpersonal
Intelligence and
Conflict Management**

**Inclusive
Communication**

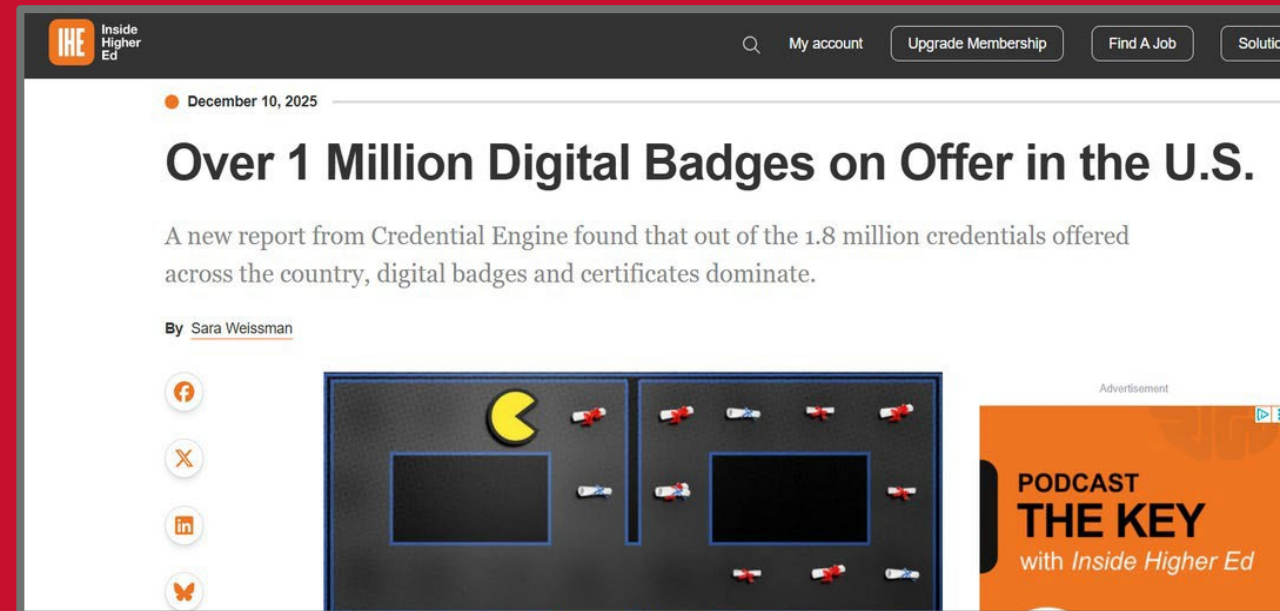
**Writing and
Editing for
Publication**

**Human Behavior
and Data Analysis**

**Team Dynamics
and Adaptability**

**Writing and Research
in the Age of AI**

But it's not all about the **Badge**



Skill Badge Program: Lessons Learned (so far)

- All degrees are professional (combat HLA faculty assumption theirs were “transfer degrees”)
- Translation of academic to professional language is crucial
- Employer involvement is time-intensive but necessary
- Measuring impact will take time



Postsecondary Approaches to Workforce Training



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The Growth of Microcredentials

- The rising cost of college. Reduced confidence in higher education and fear of debt
- Technological change and the growing availability of alternatives to traditional higher education – open courses, AI-powered instruction
- Skills-based hiring and skills shortage in local workforces
- Micro-credentials can be a quick, inexpensive way to increase postsecondary attainment among underserved student populations
- Some states are providing financial aid for students pursuing micro-credentials

Source: Hultquist & Murphy (2025) How microcredentials are revolutionizing the higher education business model

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How states can protect the value of micro-credentials

- Statewide credential value frameworks
 - Establish definition of a valuable credential
 - Create an official list of high-quality credentials offered across the state, overseen and regularly revised by a committee of experts
- To determine credential value, states often evaluate:
 - Credential validation – employers demand the credential and recognize it as signaling proficiency in some skill
 - Labor-market value - wage premiums and improved economic mobility
 - Identification of costs and benefits
 - Institutional accountability – enrollment and completion rates
- At least 16 states currently have credential value frameworks

Source: Hultquist & Murphy (2025) [How microcredentials are revolutionizing the higher education business model](#)

Postsecondary Approaches to Workforce Training

Key Questions



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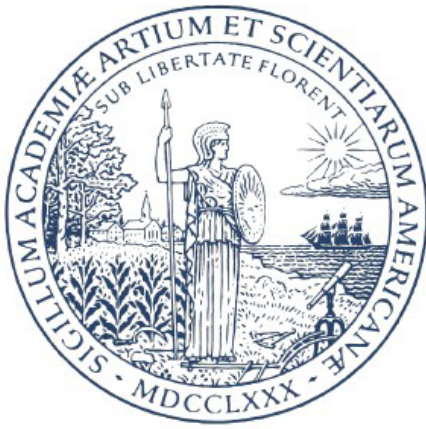


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Recommendations from the Literature

- Examine existing programs to identify where clusters of skills related to a planned micro-credential are already being taught but not transparently communicated to employers
- Explore open-source and low-cost content platforms such as Coursera and Credly for potential material
- Leverage existing partnerships to get existing content from national and international experts at other institutions
- Regularly initiate a labor-market informed needs assessment
- Collaborate with HR directors
- Integrate learning at work and learning in college into logical credential pathways
- Revisit employers engaged in development of micro-credentials and the feedback they gave
- Gather feedback from employers who hire graduates of new credential programs
- Use feedback to improve programs

Source: Hultquist & Murphy (2025) [How microcredentials are revolutionizing the higher education business model](#)



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**Building a Blueprint for Future Work:
*Opportunities, Needs, and Ongoing Questions***

December 18, 2025



Looking Ahead...

Opportunities: What do you think are the best opportunities to further develop?

Needs: What do we need to make progress?

Other Stakeholders: What could be the role of government and philanthropy? Other stakeholders?

Questions: What questions do you still have? What puzzles has this meeting surfaced?