

Ready to Credential?: How to Prepare Your Institution for STEM Microcredential Implementation

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A Changing Learning Landscape

Learners need more flexible, relevant pathways. Traditional systems weren't built for today





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Microcredentials as a Bridge

EDUCATION
Courses
Programs
Degrees

MICROCREDENTIALS
Signal New Learning
Demonstrate Skills
Translate Experiences

WORKFORCE
Jobs
Roles
Career Outcomes

Microcredentials bridge education and workforce outcomes

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Badge vs. Microcredential: Key Differences

Microcredential
Represents the actual skills, knowledge, and competencies the earner has demonstrated.

Digital Badge
Merely the visual representation, digital artifact, or container for a credential.

All microcredentials can have badges, but NOT all badges are microcredentials.

Three Things to Look For

Verified Assessment
Is there evidence of rigorous evaluation to prove the earner demonstrated the targeted competency?

Transparent Standards
Are the specific skills, evaluation criteria, and learning outcomes clearly defined and accessible?

Industry Recognition
Does it translate to workforce needs and hold recognized value for employers and institutions?

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Microcredential or Badge?

United States Army

Agile Foundations

Earned by completing the Agile Foundations course

Issued by the Department of Defense

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Microcredential or Badge?

I'm happy to report that I've passed the exam and obtained the Project Management Professional (PMP)® certification from Project Management Institute!

#lifelonglearning #projectmanagement



Project Management Professional (PMP)® was issued by Project Management Institute to Bhan Lam.

credly.com

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Microcredential or Badge?



Gurvinder Rekhi

Vice President and Chief Information Officer

Days 1

Sharing badge from EDUCAUSE.



Proposal Reviewer 2025 was issued by EDUCAUSE to Gurvinder Rekhi.

credly.com

Roder Singh and 25 others

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Microcredential or Badge?

I recently earned my hand and upper extremity microcredential from NBCOT. I have greatly enjoyed my last 2.5 years working in outpatient upper extremity orthopedics.



Hand & Upper Extremity Microcredential - BROOKE MARILYN WERNER - National Board for Certification I...

certificates.nbcot.org

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The Challenge: STEM Microcredentials Exist Within a Complex Ecosystem

Supporting learners requires coordination across institutions, policy environments, workforce partners, technology systems, and credential providers



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Understanding the Complex Ecosystem

1M+ U.S. Credentials

Offered by more than 60,000 providers, including:

- Higher education institutions
- MOOC providers
- Non-academic institutions
- Industry associations

Source: Credential Engine



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Key Stakeholders

LEARNERS Use for career entry and upskilling Barrier Unclear pathways, inconsistent employer recognition	EMPLOYERS Used to identify and hire skilled candidates Barrier Uncertainty about quality and value
HIGHER EDUCATION Develop and integrate credentials into programs Barrier Faculty resistance, lack of standardization	POLICYMAKERS Regulate and support credential systems Barrier Fragmented policies, limited shared frameworks

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Fragmentation

Source: Moore, under review

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The CREDO Framework (Moore, under review)

Source: Moore, under review

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CREDO FRAMEWORK

Connecting stakeholders, processes, and decisions across the institution

Why It Matters

- Prevents siloed efforts
- Supports informed decision-making
- Reduces duplication and inefficiencies
- Sustains implementation momentum

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Coordination in Your Context

How are implementation efforts coordinated across units, functions, and stakeholders?

1. Who is currently involved in implementation discussions?
2. How are decisions communicated across units and stakeholders?
3. Where do coordination challenges or silos emerge?



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CREDO FRAMEWORK

Clarifying ownership, decision-making, and accountability



Why It Matters

- Reduces confusion and duplication
- Clarifies who is responsible for key decisions
- Strengthens accountability



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Roles & Responsibilities in Your Context

Who owns decision-making, accountability, and oversight for microcredential initiatives?

1. Who is responsible for leading implementation efforts?
2. Who has authority to make key decisions?
3. Where are responsibilities unclear or overlapping



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CREDO FRAMEWORK

Aligning credentials with workforce needs, institutional priorities, and stakeholder expectations



Why It Matters

- Ensures relevance and value
- Strengthens stakeholder buy-in
- Supports workforce and learner needs
- Improves long-term sustainability

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Ecosystem Alignment in Your Context

How well do current efforts align with workforce, institutional, and stakeholder needs?

- Which stakeholders currently inform credential decisions?
- How are workforce and learner needs being considered?
- Where do gaps or misalignments currently exist?

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CREDO FRAMEWORK

Building high-quality credentials with clear competencies and assessments



Why It Matters

- Improves credential quality
- Supports learner success
- Strengthens trust and recognition
- Creates consistency across offerings

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Development in Your Context

How are credentials designed, developed, and supported within your institution?

1. Who is involved in credential design and development?
2. How are competencies and assessments determined?
3. What capacity or support gaps exist for development efforts?

The logo of the Center for Credentialing & Evaluation (CCE) is located in the bottom left corner of the slide. It features a circular icon with a stylized 'C' and 'E' inside, followed by the text 'CCE' and 'Center for Credentialing & Evaluation' in a smaller font.

The logo of the Institute for Higher Education Research (IHER) is located in the bottom right corner of the slide. It features a stylized 'IHER' acronym followed by the text 'INSTITUTE FOR HIGHER EDUCATION RESEARCH' and 'UNIVERSITY OF CALIFORNIA' in a smaller font.

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CREDO FRAMEWORK

Supporting long-term sustainability through systems, policies, and resources

A puzzle piece icon with the word 'Operations' written on it. The puzzle piece is dark blue with a white outline and a small white circle in the center containing a stylized 'O'.

Why It Matters

- Ensures consistency and scalability
- Supports long-term sustainability
- Creates capacity for growth
- Maintains quality over time

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Operations in Your Context

What systems, policies, and resources support long-term sustainability and scale?

1. What systems currently support microcredential implementation and management?
2. What policies, processes, or resources help ensure long-term sustainability?
3. Where are the biggest operational gaps or risks?

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Bringing It All Together

As you reflect on your institution:

1. Which CREDO dimension represents your greatest readiness challenge?
2. Which dimension is currently your greatest strength?
3. Where should your institution begin?



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Continue Your Learning

Recommended Competency-Based Learning Microcredentials:





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EXPLORE. CONNECT. CONTRIBUTE

Continue the Conversation

The C3 Ecosystem was created to help connect people, resources, credentials, and opportunities across that landscape:

- **Explore** credentials, pathways, and emerging opportunities through *The Credential Exchange*
- **Connect** with resources, tools, and research related to STEM microcredentials
- **Contribute** to a growing ecosystem and stay informed as new resources, including the CREDO Planning Tool, become available



<http://c3hub.link/ecosystem>

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