



MARINE TECHNOLOGY SOCIETY

MICROCREDENTIALS INITIATIVE

MICROCREDENTIALS

What are microcredentials?

- Short, competency-based recognitions, with demonstration of mastery
- Transferrable electronic badge is issued
- Badges can be added to resumes, LinkedIn profiles or other social media

Microcredentials can be “stacked” in various ways to build toward competencies needed for learners to attain their specific certification, degree and/or employment goals.



MICROCREDENTIALS

Microcredentials are:

- Personalized: create own pathway based on interests and career goals and address gaps in skills
- Flexible: addresses increasing need for flexible learning mechanisms
- Performance-based: awarded based on demonstrated mastery of the subject matter



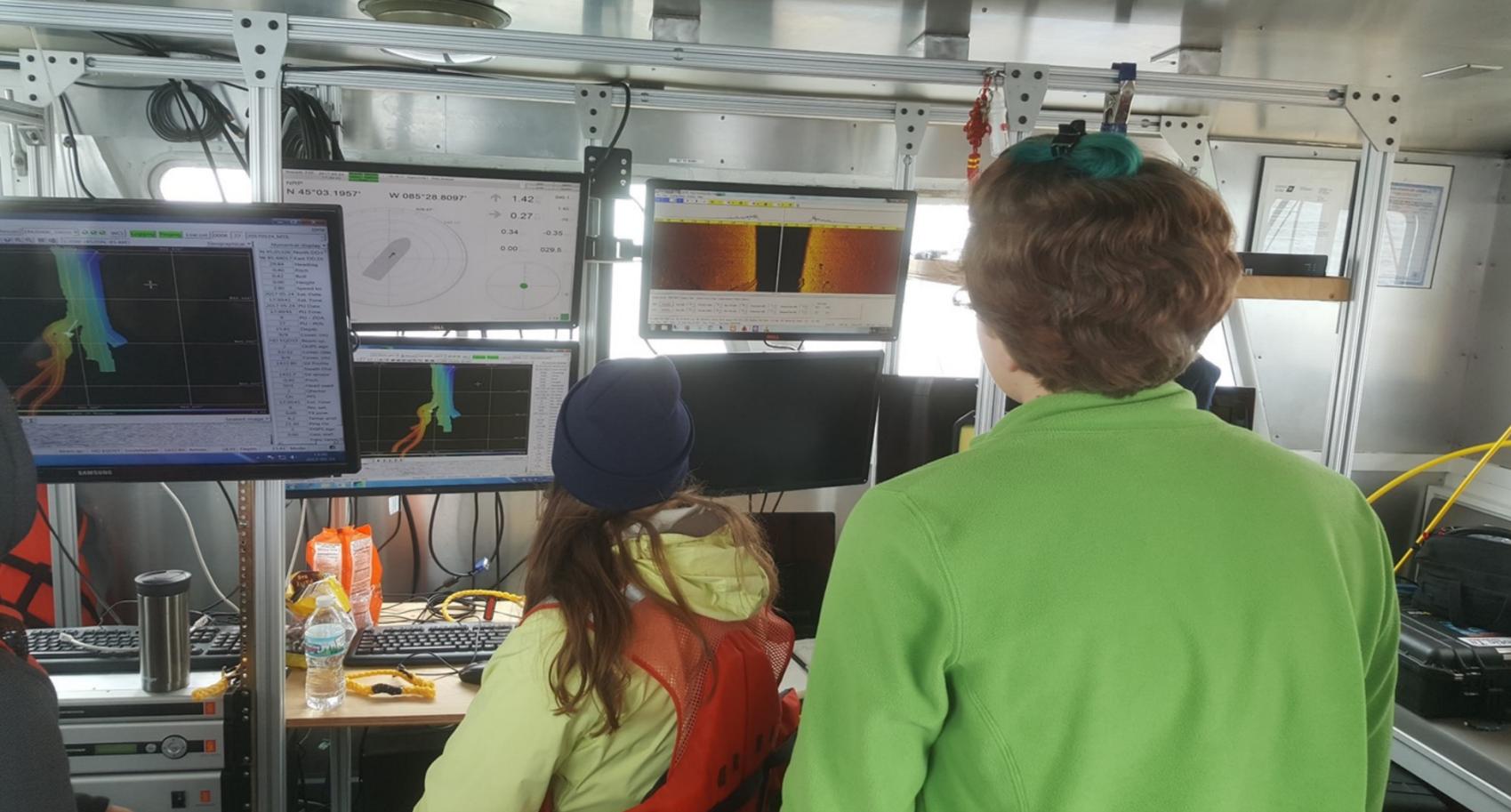
MICROCREDENTIALS

Stackable MTS microcredentials:

- Will be endorsed by accredited institutions
- Directly address the workforce preparation need
- Improve the ability of educational institutions to transition some of their programs to skills based credentialing

The content offered within the microcredentials will not only address the technical content, but will be framed around the U.S. Department of Education's Career and Technical Education (CTE) tenets.





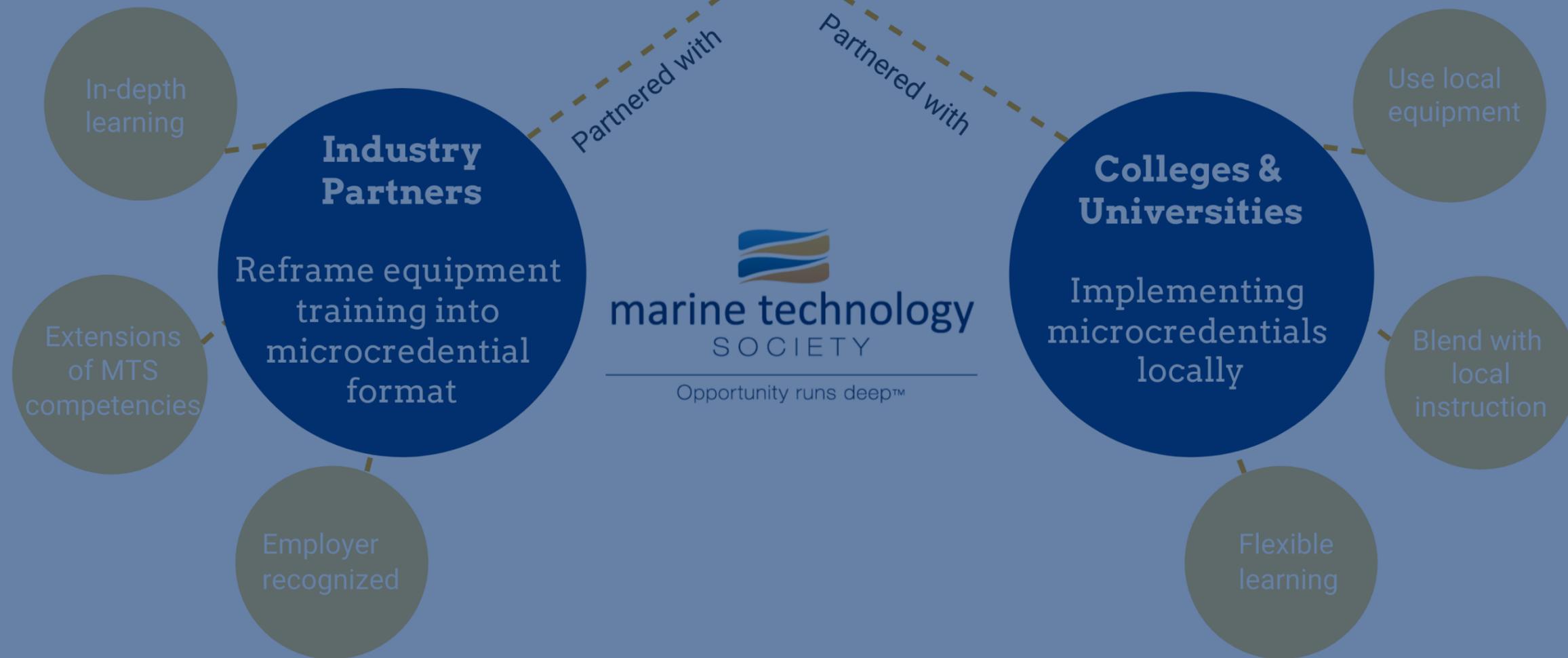
WORKFORCE DEVELOPMENT

Innovative and flexible
pathways

Recognition of skills -
microcredentials

Partnerships





Guidance provided by

Academia

Industry

MTS
Microcredentials
Foundational
Intermediate
Advanced

Gov't

Military

Guidance provided by

In-depth learning

Industry Partners

Reframe equipment training into microcredential format

Extensions of MTS competencies

Employer recognized

Partnered with

Partnered with



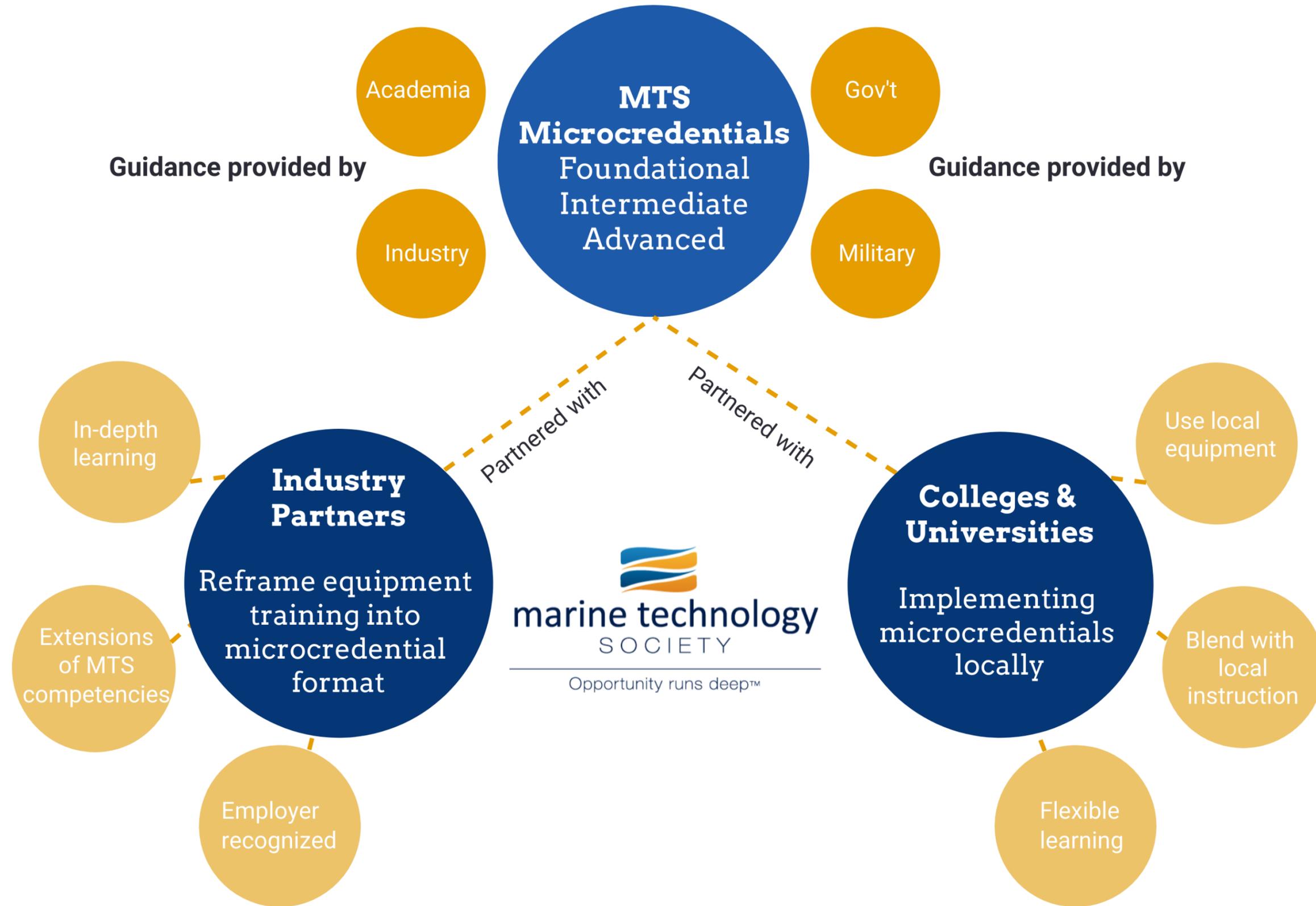
Colleges & Universities

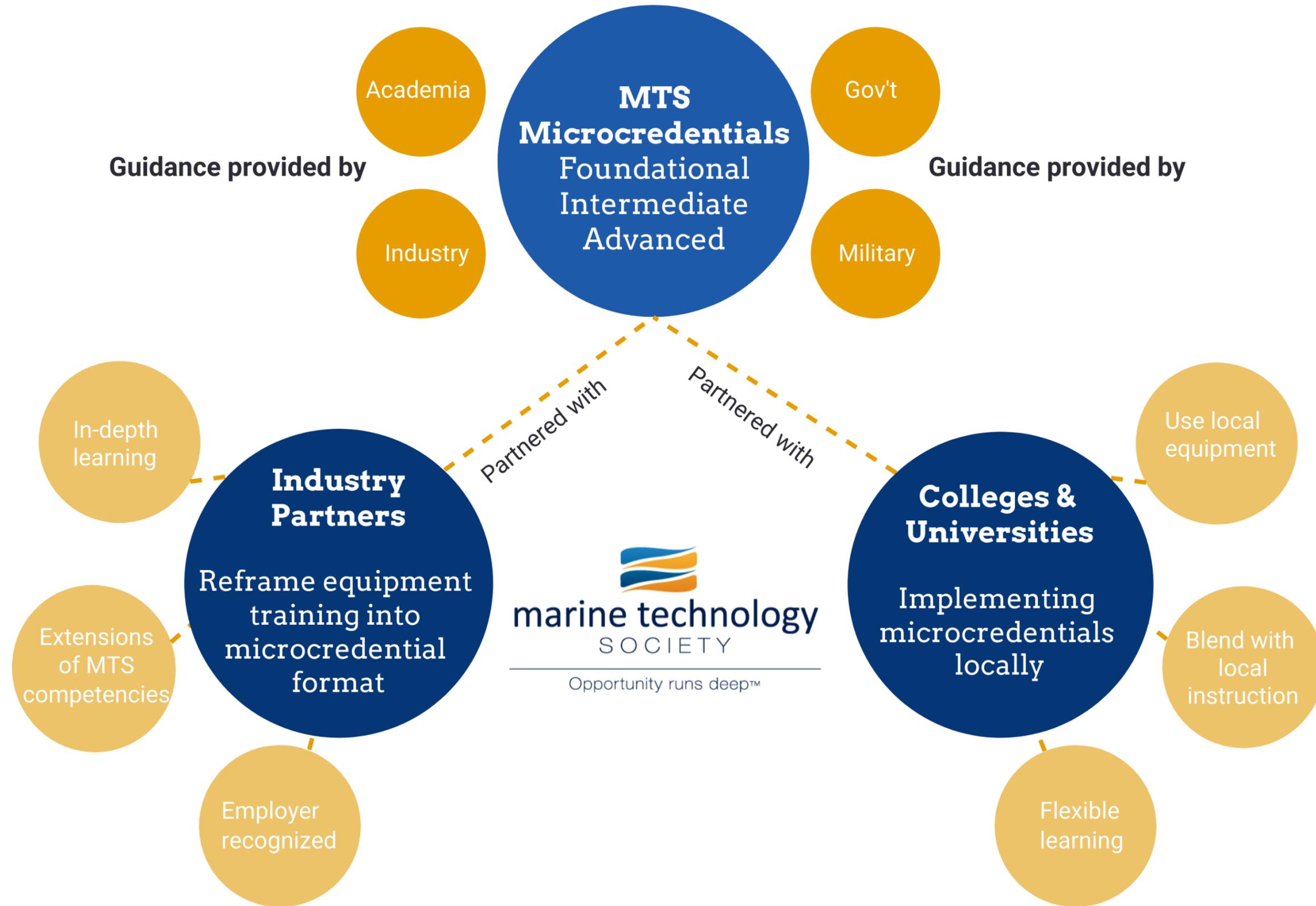
Implementing microcredentials locally

Use local equipment

Blend with local instruction

Flexible learning





MICROCREDENTIALS

Ability Levels

Foundational (Learning focus)

Validated Experience:

- Fundamentals of the technology
- Beginning concepts
- Uses/application
- Basic knowledge demonstrated

Intermediate (Learning and competency demonstration/practicum)

Validated Experience:

- Technology applications
- Intermediate concepts
- More complex uses
- Intermediate level knowledge demonstrated
- PD at work and application

Advanced (Competency mastery through demonstration)

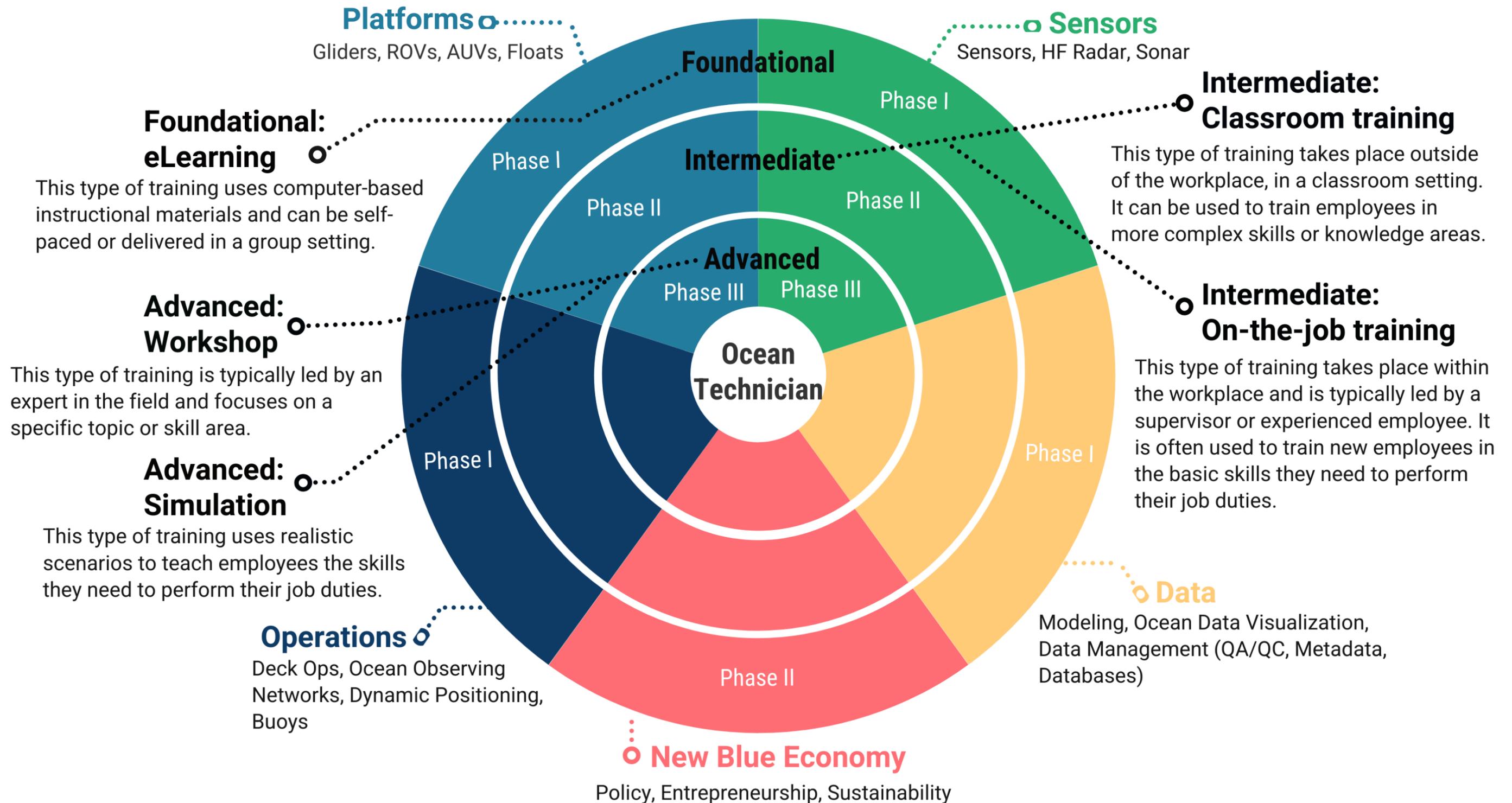
Validated Experience:

- Practical experience (months to years)
- Capstone Experiences – demonstration of abilities
 - Platforms
 - Sensors
 - Data



Building an Ocean Technician Workforce

The most effective preparation combines several different types of training, to ensure that technicians have the opportunity to learn in a variety of ways and master the skills they need to be successful in their role.



MICROCREDENTIALS

MICROCREDENTIALS AVAILABLE FOR AWARDING:

- **FOUNDATIONAL GLIDER HARDWARE**
- **FOUNDATIONAL GLIDER SOFTWARE**
- **FOUNDATIONAL SONAR**
- **FOUNDATIONAL ROV**
- **FOUNDATIONAL DECK OPS**

MICROCREDENTIALS IN DEVELOPMENT:

- **INTERMEDIATE GLIDER SOFTWARE**
- **ADVANCED GLIDER**
- **ADVANCED MULTIBEAM SONAR**
- **FOUNDATIONAL PROTOTYPING**
- **FOUNDATIONAL FLOATS**

MICROCREDENTIALS ONLINE:

- **WHAT IS THE BLUE ECONOMY**
- **WHAT IS MARINE TECHNOLOGY**



CULTIVATING AWARDING PARTNERS

**RUTGERS UNIVERSITY
NORTHWESTERN MICHIGAN COLLEGE
UNIVERSITY OF ALASKA
STOCKTON UNIVERSITY
UNIVERSITY OF SOUTHERN MISSISSIPPI
UNIVERSITY OF WASHINGTON
OREGON STATE UNIVERSITY
UNIVERSITY OF RHODE ISLAND
UNIVERSITY OF MASSACHUSETTS - BOSTON
UNIVERSITY OF NEW HAMPSHIRE
MISSISSIPPI GULF COAST COMMUNITY COLLEGE**

**PLOCAN
UNIVERSITY OF DELAWARE
MISSISSIPPI STATE UNIVERSITY
PEARL RIVER COMMUNITY COLLEGE
UNIVERSITY OF SOUTH FLORIDA
FLORIDA ATLANTIC UNIVERSITY
UCSD - SCRIPPS
EAST CAROLINA UNIVERSITY
UNIVERSITY OF VIRGIN ISLANDS
NATIONAL OCEANOGRAPHY CENTRE**

**DEVELOPING RELATIONSHIPS WITH COMPANIES AND
INDEPENDENT TRAINERS TO SERVE AS AWARDING PARTNERS**



AWARDING MICROCREDENTIALS

Competencies equate to badges

Badges vary in length of time

Awarded by MTS to partner schools

Partner schools inform MTS

Can be alongside locally issued badges

Assessment rubrics will be developed



OPPORTUNITIES

Recruiting for Review Team Members

Recruiting for partners to implement Foundational ROV, Sonar and Glider

Recruiting students for summer experiences





Opportunity runs deep™

DISCUSSION

STRUCTURE OF THE MICROCREDENTIALS AND PROGRAM

WHERE ARE THE PAIN POINTS?

TRAINING “SUPPLY”

TRAINING “DEMAND”

POTENTIAL FOR ADOPTION AND GROWTH

TOPICS FOR FUTURE MICROCREDENTIALS

