

OPPORTUNITIES AND CHALLENGES IN THE DEVELOPMENT OF NEW MICRO CREDENTIALING PROGRAMS

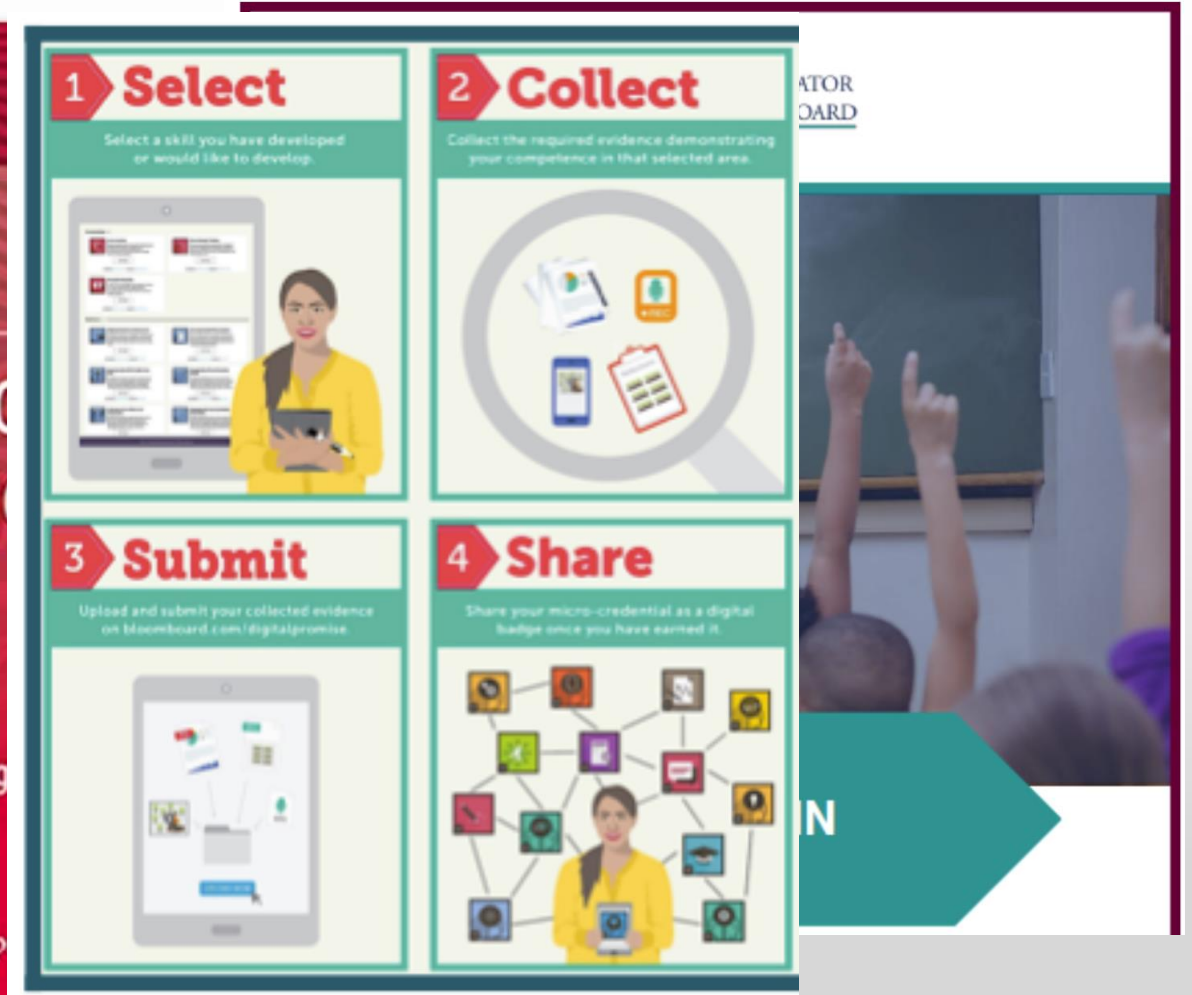
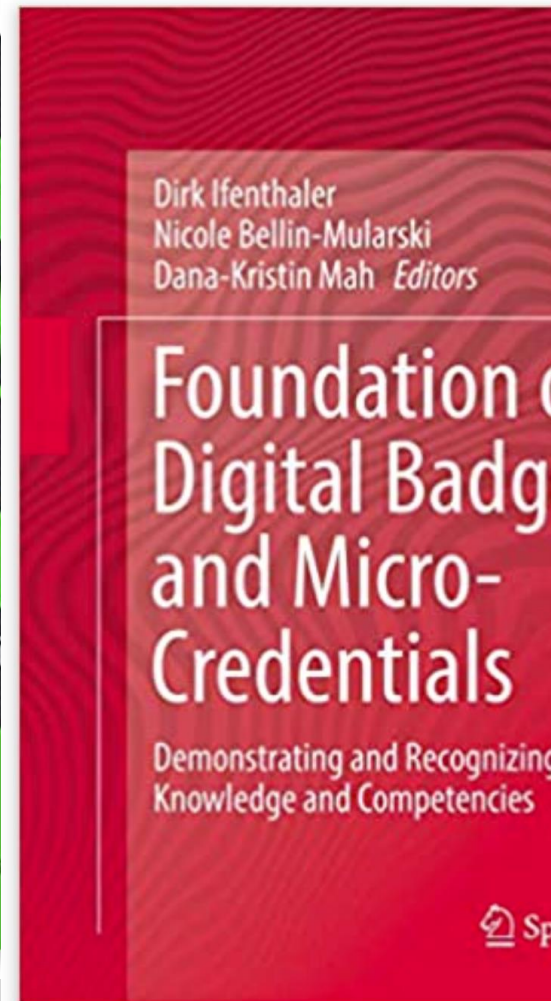
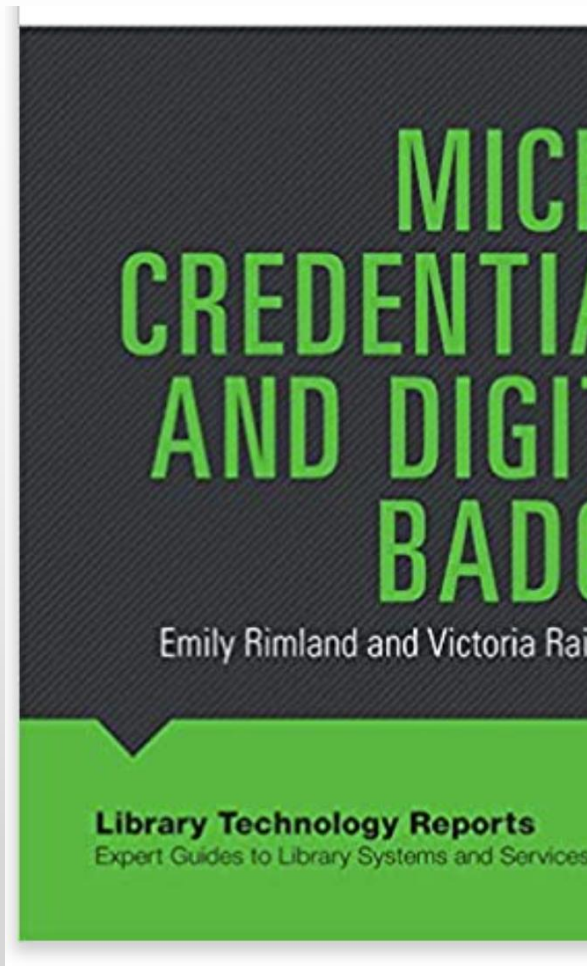


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THE BUZZIEST OF BUZZWORDS



SOME FUN SOURCES OF INFORMATION

- White House Executive Order 13932
- AIR: *Measuring Skills at Work*
- Christensen Institute: *Developing a student-centered workforce through micro-credentials*
- National Education Association: Stackable credentials

WHITE HOUSE EXECUTIVE ORDER 13932

- Released June 26, 2020
- Focused on the hiring of personnel at the federal level
- Decrease degree-based hiring (Bachelor's degree required)
- Increase use of assessments to identify skills and competencies
 - Decrease use of *self-assessments*
- Implementation has been pushed back; but the most recent guidance indicated that departments should comply with the requirements 50 percent of the time by May 30, 2022

AIR: MEASURING SKILLS AT WORK

- Case studies of employers' skill validation practices
 - Comcast, IBM, Petsmart, etc.
- Covered topics such as
 - Identification of appropriate skills
 - Measurement models implemented
 - Validation of skills
 - Tracking after the fact
- Many organizations leveraged available position descriptions from places like O'Net and tailored it based up in house SME

CHRISTENSEN INSTITUTE: *DEVELOPING A STUDENT-CENTERED WORKFORCE THROUGH MICRO-CREDENTIALS*

- Focused on the skills necessary for teachers to devise student centered (tailored) educational programs for students
- Identified a series of stackable competencies that would be appropriate for various teaching roles
- Reviewed implications for adopting this type of credentialing for teachers, employers, government

EXAMPLE OF COMPETENCY-BASED CREDENTIAL

- Central Region Agricultural Career Pathways Consortium
 - Central California
 - Train and credential students in high-demand fields such as Agricultural Mechanics, Agriscience, and Horticulture
 - 23 high-schools, 3 community colleges and 3 universities
 - Connect employers with schools
 - Creating credentials that implement a combination of MCQ and performance tasks
 - Leveraging of existing systems that brought students together for fairs and student competitions

SOME CHALLENGES FOR COMPETENCY-BASED AND MICRO CREDENTIALS

- Definitions of the competency or credential can be somewhat fuzzy
- Finances (both beginning and ongoing)
- Small sample size
- Development resources
- Maintenance requirements
- Defining the appropriate construct(s) and acceptable performance
- Sustainability

SOME CHALLENGES FOR COMPETENCY-BASED AND MICRO CREDENTIALS

- Definitions of the activities, processes, requirements can be fuzzy
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DEVELOPMENT AND MAINTENANCE RESOURCES

- Some education groups can get start-up money or grant money for the program development
- New programs need to invest in the infrastructure necessary for long-term sustainability (item banking, candidate database, reporting tools)
- Programs are not aware of the continuous cycle of work necessary to maintain an assessment program
 - No, you and your friends can't be the only people writing test items
 - Yes, we should check the item statistics
 - No, the passing score is not automatically 70%
 - Yes, you might have to create another test form

APPROPRIATE CONSTRUCT



- Many micro credentials are driven within certain employer requirements
- Many constructs are unique to the given context and might not be portable to new situations
- The more tightly defined, the measurement can become more focused BUT the more tightly defined construct can lose relevance more quickly when moving to slightly different context
- **OPPORTUNITY:** Stackable credentials can help develop more comprehensive credentials while maintaining tighter definitions of each construct

SUSTAINABILITY

WITHIN AN ORGANIZATION

- Provides consistent infusion of new employees who require training/certification
- Provides funding from the organization that has a stake in continuing the program

OUTSIDE OF A SINGLE ORGANIZATION

- Large enough of a population with similar requirements
- Large enough infrastructure already in place

SUSTAINABILITY (PORTABILITY)

- For many micro credentials, one key aspect of long-term sustainability is finding an audience for their credential outside of their immediate target
- Many micro credentials, by their nature, are designed to be targeted and specific, limiting their portability
- Micro credentials may be built to be consistent with the *Test Standards* and provide validity evidence to support their use
- But is psychometric rigor really the key aspect of what is required?

SUSTAINABILITY (PORTABILITY)

- Institute for Credentialing Excellence (ICE) established the National Commission for Certifying Agencies (NCCA).
- 2010 released *Defining Features of Quality Certification and Assessment-Based Certificate Programs*
- Reviewed 12 key distinctions between Certification versus Assessment based certificates
- Most micro credentials are built in a manner consistent with the definition of Assessment-based certificates

12 ESSENTIAL DISTINCTIONS

- Primary Focus
- Content
- Oversight
- Provider Role in Education & Training
- Evaluation
- Maintenance
- Assessment
- Validation of Content
- Standard Setting
- Education & Training Requirements
- Individuals
- Program Purpose

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PROVIDER ROLE/EDUCATION & TRAINING

	Certification	Assessment-based certificate
Provider role & Education & Training	Certification program is independent of any education program	The certificate provide also provides required educational program
	Education requirements can be included, but the certification provider can NOT be the sole provider of any education program	Assessment is designed to measure intended learning outcomes from the education program
	Certification provider is not responsible for credentialing or certifying education programs	

ASSESSMENT CONTENT

	Certification	Assessment-based certificate
	Based upon the KSAs necessary for a given occupational role	May include KSAs for a given occupation or general knowledge
	Determined using a formal process (job analysis)	Determined with a systematic review of participant, industry and institutions requirements
Content	Periodically updated based upon a formal study	Periodically updated with the assistance of SMEs

ASSESSMENT AND VALIDATION

	Certification	Assessment-based certificate
Assessment & Validation	Summative assessments administered in a secure environment	Both formative and summative assessments can be part of the program
	Assessment is taken after candidates have an opportunity to learn the given KSAs	Summative assessment administered after the completion of the educational program
	Documentation of the link between the results of the job analysis and the test blueprints	Documentation of the link between the intended learning outcomes and the assessment blueprints

WRAP-UP



- Micro credentials are clearly here to stay
- Many of the programs out there offering micro credentials without clear documentation for the value and appropriateness of the credential
- More systematic and consistent standards for how terms can be applied could serve the overall education, credentialing and workforce sectors

- THANKS!
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