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# Micro-Credentials:

## Do they hold promise for low-skilled workers?

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Micro-credentials can help workers build skills in demand in the labor market and may help employers better match applicants to job requirements. They take a relatively short period of time to obtain; focus on a single (or a few) observable job competencies; and are typically awarded after demonstrated mastery of materials, which are often delivered online. Micro-credentials have proliferated in recent years, with both new providers and new credentials emerging. This proliferation has created a field described as the Wild West: providers have coined but not consistently used a range of terms and definitions for the field and requirements for completion of a credential vary widely. This brief summarizes results of an environmental scan, funded by the U.S. Department of Labor, to describe micro-credentials and assess their potential to build employment opportunities for low-skilled, entry-level workers.

### Elements of the scan

- Literature review
- Web search review
- Interviews with 26 individuals
  - Credential experts
  - Micro-credential practitioners

## The micro-credential ecosystem

The scan identified a consensus definition of micro-credentials as being more specialized than traditional academic degrees. It also identified a typical process for micro-credential development: (1) identifying the competencies needed to perform a specific job successfully, often in consultation with employers or subject matter experts who understand required competencies; (2) focusing content development on one (or only a few) of these competencies; and (3) developing a platform through which content is delivered.

This process involves many stakeholders, including employers, providers, credential stakeholders, and quality assurance providers. Figure 1 on the next page illustrates the ecosystem in which the stakeholders interact. Employers need skilled workers, and

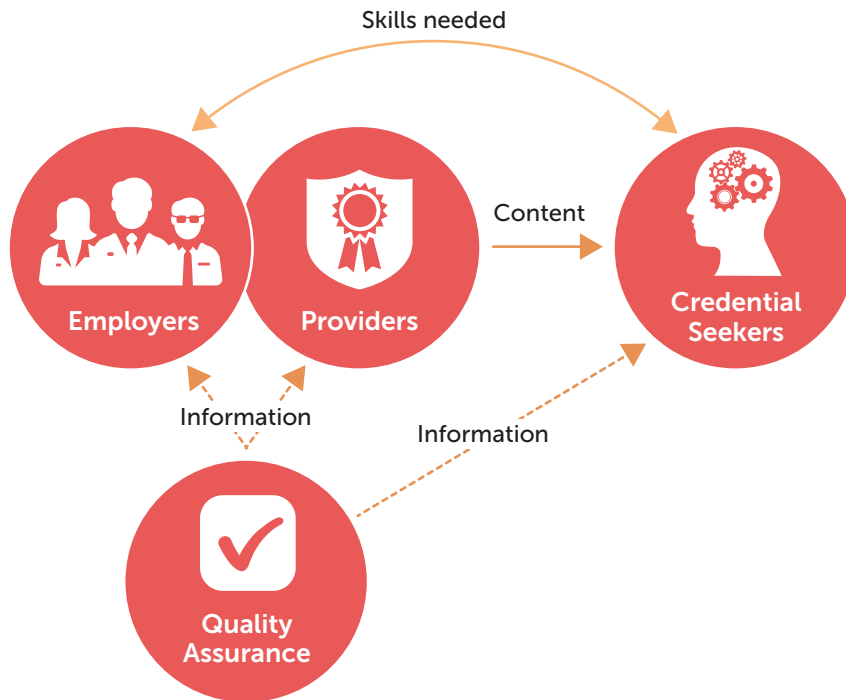
micro-credentials allow credential seekers to gain the competencies employers need or to demonstrate to employers that they have them. Because micro-credentials often signal highly specialized skills or are developed for a specific employer, they can facilitate a direct link between employers and job seekers. Although employers can also serve as micro-credential providers, other entities, such as educational institutions, typically provide a venue or structure for offering the credential to seekers. Finally, where quality assurance is applied, accreditation organizations and others hold providers to a standard for their content and provide information to both employers and credential seekers about the quality of the credential, as the one-way arrows in the figure indicate.

### Micro-credentials defined

Shows mastery of one or more job competencies and is more specialized and focused a degree. They include:

- Certificates
- Certifications
- Badges

**Figure 1. The micro-credential ecosystem**



## Advantages that make micro-credentials promising

The scan identified several advantages of micro-credentials that might help low-skilled, entry-level workers build employment opportunities:

- Respond to labor market needs.**  
 Providers can quickly alter credential requirements to focus on new in-demand skills because micro-credentials are narrower than degrees and are not subject to the constraints set by accreditation bodies.
- Build in-demand skills.**  
 Micro-credentials that reflect competency in skills that are in demand in the labor market are valuable in hiring if employers are aware of the specific skills and competencies the credentials represent. Knowing the specific skills job applicants with a credential possess can help employers recruit applicants with the precise skills they need instead of using degrees that may signal a set of general skills.
- Stackable for career mobility.**  
 Providers generally offer some micro-credentials at the entry level and others at more advanced levels that require prior education or experience. This variation allows individuals to stack credentials for career mobility.
- Low time and financial costs.**  
 Most micro-credentials can be earned within one year, and many can be completed in three months or less. The online availability of many micro-credentials can make them appealing to individuals with competing needs for their time. Similarly, micro-credentials, even when stacked, tend to cost less than degrees. A few providers offer free courses and free credentials, while others offer courses for free but charge for the awarded credential.

"[Micro-credentials are] a way for employers to be able to do recruitment a lot more surgically than simply saying 'I assume everyone should have a bachelor's degree,' which is a pretty blunt instrument."

— Credential expert

"[Micro-credentials] are a very effective way of enhancing your learning based on what you need at that time and then you can keep adding (to it). To me, it fits into the model of lifelong learning, where you are learning incrementally."

— Credential expert

## Challenges facing micro-credentials

The scan identified several challenges to micro-credentials achieving their potential:

- **Diffused information makes credential identification and selection difficult.**

The proliferation of micro-credentials, the plethora of providers developing them, and a lack of standardization in structure and requirements can make it hard for employers and job seekers to distinguish different micro-credentials.

- **Credentials have uneven quality.**

Uneven quality limits employers' and workers' confidence in them. Even with an understanding of the competencies a credential is designed to represent, the employer may not trust the quality of that credential. Without quality standards and processes, employers will not know if credential holders possess the skills needed in the job.

- **Established employer policies can be difficult to change.**

Existing practices and internal policies often lead employers to look for candidates with degrees instead of particular skills. Changing these practices and policies can be difficult.

- **Limited skills and access can inhibit take-up.**

Students generally need English language fluency and basic literacy and numeracy skills, sometimes at the high school level, to acquire a micro-credential. If the credential is online, they also need computer literacy, internet access, and to be self-directed to create and follow their own timelines.

- **Funding challenges can reduce access.**

People who enroll in micro-credentials offered outside of institutions of higher education frequently are not eligible for federal financial aid to pursue them. In the past, training funds at American Job Centers could not be applied toward them either, although this might change under Workforce Innovation and Opportunity Act.

"One of the problems with micro-credentials is everyone is making it up as they go along... The risk here is you're introducing a lot of noise into an already inefficient system and making it more difficult for employers to decipher."

— Credential provider

"We still have a fairly biased . . . system that looks at things like degrees instead of skills. For as long as you have that, that's a problem."

— Credential provider

## Promising Practices

In 2014, the U.S. Departments of Labor, Commerce, Education, and Health and Human Services summarized the evidence on adult job training strategies and programs. They identified six practices used by employment and training programs that showed evidence of success and can be applied to micro-credential delivery.<sup>1</sup>

### 1. Provide a degree or industry-recognized credential related to jobs in demand

Many of the micro-credentials included in this scan are industry recognized. Those are generally in the information technology sector, were developed with input from industry, and were validated through a trusted process.

### 2. Use flexible and innovative training

Interviews revealed several types of innovative training for micro-credentials, including (1) developing hands-on projects in which students create products that can be used to showcase their skills to prospective employers; (2) offering materials online to allow students to accommodate their unique circumstances while completing them; and (3) providing bridge sessions to prepare students for more advanced or intensive programs.

The full report is available at <https://www.mathematica-mpr.com/our-publications-and-findings/publications/micro-credentials-do-they-hold-promise-for-low-skilled-workers>

### 3. Relate training closely to a real job or occupation

Providers often develop micro-credential courses or programs by breaking down a job into its required competencies and creating one or more credentials that represent these competencies. Such a process helps ensure that the curriculum builds the skills needed to perform successfully in the job.

### 4. Engage employers and industry

Employers not only develop and offer micro-credentials. They also work with other micro-credential providers to develop curricula, validate content or credentials, or provide instruction.

### 5. Convey labor market information

Digital badges can embed links to labor market information to show what skills the badges represent and available jobs that require those skills. Apps can allow job seekers to access short online training courses to earn badges in areas that are related to available jobs.

### 6. Integrate education, training, and support services

Some micro-credential providers offer students a comprehensive set of academic, nonacademic, and career navigational supports and services. Others partner with nonprofits or American Job Centers to provide an array of services, while still others offer specific targeted services.

## Next Steps

The scan was not designed to be an exhaustive review of micro-credentials. Rather, it provides a launching point for discussions about the potential of micro-credentials to better employment and earnings for low-skilled, entry-level workers. The next step is to develop and conduct research that continues to build knowledge about their potential and, ultimately, assesses their effectiveness.

<sup>1</sup>U.S. Department of Labor, U.S. Department of Commerce, U.S. Department of Education, and U.S. Department of Health and Human Services. "What Works in Job Training: A Synthesis of the Evidence." Washington, DC: U.S. Department of Labor, U.S. Department of Commerce, U.S. Department of Education, and U.S. Department of Health and Human Services, July 2014. Available at <https://www.dol.gov/asp/evaluation/jdt/jdt.pdf>. Accessed May 17, 2017.