Credential As You Go is working toward a nationally recognized system of incremental credentialing that captures and validates all relevant learning, enabling individuals to be recognized for what they know and can do. Many types of credentials (e.g., degrees, certificates, industry certifications, licenses, badges, microcredentials) may document an individual’s learning, and these credentials are awarded by many different entities. Credential providers include community and technical colleges, four-year colleges and universities, third-party organizations, companies, the military, and state licensing boards.

Credential As You Go is just one of many efforts underway to improve that ecosystem—in the U.S. and in other nations. A related initiative, the Learn & Work Ecosystem Library, has catalogued hundreds of initiatives, alliances, and networks that are doing just that. They are developing new approaches and finding innovative solutions in several areas, such as: new credentialing systems, microcredentialing and badging, skills-based hiring, digital platforms to expand opportunities for learners, navigation and career advising, data standards to enable interoperability of information, and policies to guide system change.

Research Questions

The research conducted in this “mapping” study focused on four key questions:

- What do initiatives and alliances related to Credential As You Go have in common?
- Can their features be mapped according to their commonalities and differences?
- Is the Learn & Work Ecosystem Library useful as a source for information about related initiatives and alliances?
- To what extent can related initiatives and alliances build connections that can help these efforts leverage resources, learn from one another, and improve and accelerate the work of incremental credentialing and other innovations?

Methodology

The web-based Learn & Work Ecosystem Library collects, curates, and coordinates resources to support the ecosystem. Holding more than 600 articles and artifacts, the Library shares information on more than 160 initiatives and 240 alliances and intermediaries working to strengthen the ecosystem. Its Library Catalog section includes information on the 12 building blocks of the ecosystem, more than 75 related subcomponent topics, and a glossary of more than 110 terms.

Before this mapping study, Credential As You Go conducted a landscape review of policies, initiatives, and alliances in three states (Colorado, New York, North Carolina) that are rapidly prototyping incremental credentials and researching the outcomes of this work. The landscape review is included in a Report on Policies & Initiatives Related to Credential As You Go: Colorado, New York, North Carolina.

Building on the findings of the landscape review, this the authors of the second study created a mapping survey that identified 56 potential features of initiatives/alliances within seven broad categories:
• **Visibility and Transparency:** Items in this category focus on the commitment of the initiatives and alliances to visibility and transparency.

• **Funding:** Items in this category focus on the source of funding for this work. These were identified using the results from the states’ landscape reviews.

In March 2023, using a keyword search of the Learn & Work Ecosystem Library, the authors invited 11 key initiatives and alliances to participate in the mapping survey. The search for participants was informed by the more than 600 articles/artifacts in the Library and included key words/phrases related to the work of Credential As You Go:

- Incremental credentialing
- Transfer, guided pathways
- Microcredential pathways
- Quality- and competency-based frameworks
- Skills-based innovations in learning
- Data collaboratives to support new credentialing
- Pathways with an equity focus
- Learning and employment records

Lead staff members at each initiative/alliance responded to the survey. The response rate was 100%.

### Findings

The 11 initiatives and alliances exhibit many close congruities. They have 20 features (among 56 surveyed) in common (75-100%). The common features were spread across six of the seven categories—all but Leadership. The areas of 100% alignment show that all efforts are working to accelerate progress and scale, all focus on design principles, and all are presenting at major conferences.

Most initiatives are led by intermediary organizations or alliances/networks. This demonstrates the importance of intermediaries and networks in serving a range of partners. Such service takes many forms, including: creating project plans, securing funding, providing leadership/management, and conducting the outcomes research and reporting often needed for foundation-funded projects.

Few initiatives/alliances are funded by states, private investors, industry/employers, or membership organizations. A large majority (83%) are funded by foundations.

Two illustrations (p. 2 & 3) provide key features of the participating 11 initiatives/alliances by category, for those most in common (75-100% agreement), and least in common (50% or less in agreement).
### Features of Initiatives/Alliances, by Category, Least in Common (50% or Less)

#### Funding
- Federal (25%)
- State (16.67%)
- Non-profit organization (33.33%)
- Private investor (8.33%)
- Industry/Employer (16.67%)
- Membership organization (16.67%)

#### Leadership
- State government/agency led (16.67%)
- Workforce development organization led (0%)
- Intermediary/organization led (33.33%)
- Alliance/network led (33.33%)
- Employer led (0%)
- Has a leadership team (50%)

#### Visibility & Transparency
- Initiative listed at the Learn & Work Ecosystem Library (41.67%)
- Led by an Alliance/intermediary that is listed at the Learn & Work Ecosystem Library (50.00%)
- Has a newsletter (16.67%)

#### Designing Systems
- Validating learning through comprehensive records (41.67%)
- Comprehensive Learner Records (CLR), Learning & Employment Records (LER), Digital Wallets
- Now credentials are part of the outcomes (41.67%)
- Is worker-centric (41.67%)

#### Partnerships
- Employers are partners and engaged (50%)
- Four-year colleges and universities are the primary focus (33.33%)
- Focus is on all providers of quality credentials (e.g., higher education, third party) (50%)

#### Research & Data
- Has a focus on data results around employment and/or earner outcomes (33.33%)
- Participation requires an IRB approval (research component) (44.44%)

#### Scale/Scope/Vision
- Has a focus on "enabling" policy to permit innovations (25%)
Takeaways / Implications for Future Work

Initiatives/alliances have more in common than less. Although relatively few initiatives were invited to participate in the mapping effort, as a group they represent a significant and innovative body of work in the learn-and-work ecosystem. Three categories—Scale, Scope, Vision; Redesigning Systems; and Visibility and Transparency—had the highest number of common features. This suggests that these initiatives are mostly focused on changing the ecosystem. Many focus on curricular reforms, especially improving credentialing by adding smaller credentials—those that stack or align with degrees or stand alone to meet workforce needs. Several initiatives have a strong technology focus—especially technology that relates to recognizing learning as it occurs. This includes new credential verification and recordkeeping systems such as Learning and Employment Records (LERs). Other initiatives include policy efforts to improve the climate for innovation.

Two categories—Funding and Leadership—had the lowest number of common features. This may suggest the diversity among the initiatives in organizing themselves and securing funding. Whatever the specific focus—be it technology, curriculum, or policy—initiatives/alliances are closely aligned to:

- Develop and implement strategies that recognize learning beyond traditional degree programs.
- Capture that learning into interoperable and displayable records of learning and employment.

The landscape, though ripe for greater collaboration, faces key challenges. A common vision is vital to intentional and effective collaboration among organizations—and this study reveals 100% agreement on a common vision to improve the learn-and-work ecosystem. Even though the descriptions of the individual initiatives (see Report’s Appendix) reveal many ways in which organizations are working to achieve this vision, the landscape clearly is ripe for greater collaboration. That said, progress can be hindered by:

- Competition for foundation funding. Competition for funding can lead to duplicative or overlapping efforts—at a time collaboration is needed to effect significant change.
- Lack of stability for innovation. An innovation landscape dependent on philanthropic funding can be problematic. While innovation can flourish through foundation support, when funding stops progress can lag because no replacement funding can be found.
- Collaboration issues: Some organizations collaborate more effectively than others; some work proceeds so quickly that it is difficult for all partners to participate equally effectively; and some collaboratives are so large that meaningful, effective collaboration is difficult, if not impossible.
- Sustainability: More mature initiatives/alliances are challenged to develop plans that can support efforts beyond grant-funded work.
- Lack of information on what innovations are underway in the ecosystem.

There is growing need for credible, readily accessible information on efforts working to improve the ecosystem. This research looked to four potential sources for relevant information:

- States. Their information proved limited since it was state-specific and often spotty.
- Literature on the learn-and-work ecosystem. We did not find inventories or lists of efforts; most of the material describes what should be considered in the ecosystem. Information about initiatives is not coordinated enough to reveal the cumulative effect of work underway in higher education and industries.
- Foundations. The information they provide is uneven, often hard to find, and rarely summarizes how the various initiatives advance the foundation’s strategic plan. To synthesize this information, one must visit several foundations to assemble an inventory and analysis. And even reviewing projects funded by foundations is incomplete, as not all key efforts are supported by foundations.
- Existing collaborative efforts. We did find a number of networks/alliances comprising organizations that work together in various reform areas of the learn-and-work ecosystem. They tended to be organized in discrete thematic areas such as data and standards, curricular reforms, employer hiring, nondegree credential research, and verifications and recordkeeping. Little insight was gained into how all of these areas fit together.

We found that pulling information from limited and disparate sources is ineffective for studies such as this.

There is a growing role for the Learn & Work Ecosystem Library to inform the field about key efforts to improve the learn-and-work ecosystem. The Library, launched in December 2022, is the source we found most useful in conducting this mapping initiative. It served as our main resource for
information on initiatives, alliances, and intermediaries that are working to improve the ecosystem. We tried to identify other useful resources, but few emerged—primarily because much of the information was disparate and scattered, buried in foundations’ reports and websites.

**Conclusion**

Credential As You Go’s mapping study identified several needs:

- Improve and connect information about the many efforts underway to improve the learn-and-work ecosystem.
- Communicate this information more broadly.
- Better align funding support, given the commonalities of the work, and leverage resources among initiatives/alliances.
- Study these developments in greater depth.

Thousands of alliances and initiatives are working in this landscape of innovation, and many are trying to solve similar problems. Greater collaboration, better connection of this work, and greater focus of resources would truly help this complex ecosystem take hold and thrive. Mapping the key players in this work is an important first step.

See the full report and the related state inventory report titled Policies & Initiatives Related to Credential As You Go: Colorado, New York, and North Carolina.

**Authors**

HOLLY ZANVILLE, Ph.D., Research Professor and Co-Director, Program on Skills, Credentials & Workforce Policy, George Washington Institute of Public Policy, George Washington University; Co-lead, Credential As You Go; Lead, Learn & Work Ecosystem Library

NAN L. TRAVERS, Ph.D., Director, Center for Leadership in Credentialing Learning, SUNY Empire State University; PI and Co-lead, Credential As You Go

This brief was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R305T210063 to the Research Foundation of SUNY on behalf of SUNY Empire State University. The views expressed are those of the authors and do not represent those of the Institute or the U.S. Department of Education.