Credential Data and LERs
Transparency, Quality, and Functionality:
The Role of Credential Data in the Alabama Talent Triad
Transparency, Quality, and Functionality: The Role of Credential Data in the Alabama Talent Triad

Over the last few decades, the economy has been undergoing transformation that requires more skilled labor than ever before in the U.S. In response, there have been many pathways created for individuals to earn credentials and the necessary skills for good jobs. These pathways include the traditional college and degree pathway, but also include the diverse array of credentials that are offered through apprenticeships, industry certifications, certificates, badges, and other microcredentials. As public policy leaders, employers and jobseekers seek to understand various credentialing options, the importance of credential transparency has risen to the top of the list of key transformations needed to ensure individuals can find the programs they need to efficiently upskill, building on what they already know and can do, and for employers to understand what credentials actually represent.

As a result, many states have joined efforts to create credential transparency by leveraging new technologies and open-linked data systems facilitated by the non-profit, Credential Engine. Through the collective efforts of these states, a national registry of credentials is beginning to emerge that is designed to account for the nearly one million postsecondary credentials that are offered in the U.S. There is a clear benefit to a registry of credentials – it enables a clear and comprehensive overview of where credentials are offered and the array of programs available, and acts as a vital tool in understanding our complex credentialing ecosystem in the nation. In envisioning the Alabama Talent Triad, the state of Alabama saw the necessity of participating in the national credential registry and has done so since 2019.

The Alabama Talent Triad also recognized that to achieve the state’s vision to connect citizens to all potential pathways, that the state would need to curate an Alabama-specific credential registry. The state is one of 16 early adopters of quality credential criteria and has established policies to determine which credentials are of value, meaning there is evidence that the credential can lead to further education and employment.

With the passage of Act 2023-365, Alabama has codified its non-degree credential quality assurance and transparency criteria and the iterative, demand-driven process for developing an annual list of credentials of value that have met the non-degree credential quality assurance and transparency criteria, known as the Compendium of Valuable Credentials. Act 2023-365 provides for establishing the Non-Degree Credential Quality and Transparency Committee as a committee of the Alabama Workforce Council. These steps provide the basis for sustaining Alabama’s non-degree credential policies over time.

Announced in 2021, the Alabama Credential Registry is a transparent open linked data record of all the credentials available in Alabama, most importantly the credentials of value, including certificates, licenses & degrees. Constructing a state-level registry was a conscious decision on the part of Alabama’s state leaders and is a foundational component of the Talent Triad. It enables Alabama to intentionally prioritize transparency, quality, and functionality in its work to develop a talent marketplace that serves employers, students, jobseekers and education providers, while also serving the state and national public good. Furthermore, Alabama wanted to go beyond providing a list of credentials available, and their associated quality dynamics by tagging credentials to the underlying competencies for which the credentials denote mastery.
Credential Data for Transparency, Quality, and Functionality

The Talent Triad is centered on interoperability, or otherwise described as the capacity for data systems to work together, exchanging and making use of information and data without requiring additional effort on the part of end users. When considering how to make credential data interoperable, there was one obvious choice for structuring and openly sharing the data—Credential Transparency Description Language (CTDL), the agreed-upon shared language for sharing credential data across systems. Using CTDL, the Alabama Credential Registry can support the priorities of Alabama to assure the quality, transparency, and functionality of credentials in a state-wide talent marketplace while also enabling interoperability opportunities outside of Alabama.

The rationale behind Alabama developing its own credential registry can be summarized in the following:

1. **Quality:** Alabama uses its Credential Registry for quality assurance and governance, in particular the critical role establishing quality standards and assuring the quality of programs and credentials offered in the state. The ability to ensure Alabamians have access to high-quality credentials that lead to economic mobility is top priority for the state to drive economic growth and the prosperity of its citizens. While the Alabama Credential Registry enables inclusion of all types of credentials from many types of contributors, only credentials that meet the state’s quality standards and review criteria are admitted into the Compendium of Valuable Credentials within the Registry. Alabama was an early mover among states that adopted a high-quality non-degree credential definition based on the National Skills Coalition’s definition of a quality non-degree credential:

   “A quality non-degree credential provides individuals with the means to equitably achieve their informed employment and educational goals. There must be valid, reliable, and transparent evidence that the credential satisfies the criteria that constitute quality, which include (1) substantial job opportunities, (2) transparent evidence of the competencies mastered by credential holders, (3) evidence of employment earning outcomes of individuals after obtaining employment, and (4) stability to additional education or training is strongly preferred.
   
   “Alabama’s State Workforce Development Board and 24 state education and workforce agencies adopted this definition in 2019 by administrative rule, and the definition was codified by Act 2023-365. To ensure the landscape is transparent about quality credentials offered in the state, the Alabama Credential Registry requires more data than other registries might request. This includes skills and competencies, associated wage earnings, and stackability, as well as the designation as an Alabama Credential of Value on the Compendium of Valuable Credentials. The enhanced data and data relationships, as well as the freedom to build onto CTDL, enables Alabama leaders to conceive of broader applications for the data and the provision of personalized pathways for each Alabamian.”

2. **Transparency:** The Alabama Talent Triad serves to provide clear and efficient pathways for individuals to gain skills connected to the workforce. Efficiency is gained by ensuring individuals can access credentials that build upon what they already know and can do. To serve individuals, citizens are able to build their
The Role of Credential Data

Learning & Employment Record with verified skills and credentials through the interoperability that is implemented with education provider student information systems (SISs) and LMSs to populate verified LERs. Alabamians can then use their LERs from various education partners to populate job and learning recommendations that match their current skillsets. The Alabama Credential Registry works in tandem with the Alabama LERs in making credential data and stackable sequences transparent while illuminating quality pathways that are personalized for each individual based on their current and desired skill set. The Alabama Credential Registry also ensures the transparency of credentials by including affiliated skills to support that a skills-based economy and making all learning count.

3. **Functionality:** Furthermore, the Alabama Talent Triad leverages the Credential Registry to provide recommended candidates to employers. The Registry is deeply integrated into the Skills-Based Job Description Generator in the Talent Triad that empowers employers to see and leverage credentials and skills within their job descriptions that match the LER profiles of job candidates. Individuals and employers are thereby matched to each other using a shared credential and skills language.

4. **Public Good:** The Alabama Talent Triad prioritizes interoperability and their contribution to national efforts to bring credential transparency across the country. State leaders also recognized that to serve its citizens and uphold its responsibility to facilitate transparency, along with quality and functionality, credential transparency and credential data would ultimately need to be used to drive a broader set of applications under the governance of state leaders.

**Credential Data and LERs**

The Alabama Credential Registry is valuable as a stand-alone way to understand the credential landscape, but it is only one part of the broader effort of the Alabama Talent Triad to create a talent marketplace where students, jobseekers, employers, and education and training providers can easily connect.

To best serve individuals and employers, Alabama learned early on that what was most critical to matching individuals to jobs was ensuring that the all verified and validated skills and competencies acquired through education and work. Therefore, Alabama envisioned a platform that would, on an individual learner basis, serve as a record of validated skills, in addition to linking to credential registry information with assumed skills and credentials that lack any verification or validation to the individual.

This is critical for two reasons. First, because of the variation in individual learning journeys, with learners taking different elective courses and having different work experiences, credential-level verifications inconsistently capture what an individual knows and can do. Further, to create a talent marketplace where employers could readily view job seekers’ skills, credential-level verification would not provide the detailed information on skills to create value for employers.
The Talent Triad collects data to describe credential and individuals’ skills in two ways:

1. Credentials in the Alabama Credential Registry are tagged to the skills that the credential desires to provide for individuals. This data is collected in the Alabama Credential Registry.

2. Based on individuals’ unique experiences and coursework, individual skills are logged in the LER which is visualized in the LER of each individual. This data will include both the individual skills and proficiency levels attained by individuals, sync’d from the education and training provider as the source of truth.

3. Once an individual has populated their LER with both verified and self-attested credentials, skills and competencies, they can create Digital Resumes, which are the “profiles” a user can opt to share with employers in the Talent Triad.

This is certainly a more complex and expensive approach than only verifying and linking to aggregate information about credentials and even verifying core competencies gained by most graduates would be a leap for most systems. However, Alabama views this approach as a means of building a true skills-based economy that can be trusted by employers, citizens, and education providers.

**Technology Vendors and Partners**

This unprecedented alignment and collaboration across sectors is made possible through the right tools and technology. Alabama utilizes a vendor to support the Talent Triad, including the Alabama Credential Registry, maximizing the best of Software as a Service (SaaS) and custom services. This ensures scalability, sustainability, and security, while also offering a modern experience for all Alabamians. Rather than creating in-house technology, Alabama Credential Registry is powered by EBSCOed, the leading global provider of research content and technology. In recent years, EBSCO has acted on its commitment to supporting lifelong learning through technology solutions and providing open education content for learners of all ages.

The relationship between Alabama and EBSCO is key to understanding the public-private partnership that is supporting the vision of the Alabama Talent Triad. Key aspects of the relationship are defined below.

- Like any technology vendor, EBSCOed is committed to their clients and enables their vision for solutions to the thorniest problems facing education and workforce leaders at the local, state, national, and global levels. In this case, Alabama is responsible for setting the criteria for transparency, quality, and desired functionality. As for quality and functionality, technology platforms can support these definitions established by states and other quality assurance entities but should not themselves create these definitions.

- Vendors prioritize end-user experiences. EBSCOed views its role as creating workflows that make the state’s priorities actionable. As a vendor, EBSCOed can provide the level of service, support, and continuous improvement that Alabama needs and desires for its citizens, employers, and education providers.
The Alabama Credential Registry has a partnership with Credential Engine, both who have application Programming Interfaces (APIs) that enable sharing of data between systems. Alabama prioritizes its participation in the national registry, and works to ensure that the data submitted is of the highest quality through these key steps:

The Alabama Credential Registry requires data maintenance from education providers connected to quality assurance and approval processes. Prior submissions were often unstandardized and/or incomplete. Now the Alabama Credential Registry platform ensures providers are prompted to submit complete data and maintain that data in accordance with state governance processes and best practices supported by workflows housed within the Talent Triad.

- The new Alabama Credential Registry also supports skills and competencies as well as standardized stackable sequencing at the credential level for a more browsable and navigable pathway experience.
- Once required data is submitted to the Alabama Credential Registry, it can be submitted for state review and inclusion in the Compendium of Valued Credentials within the Alabama Credential Registry.
- The Alabama Credential Registry then shares that data to Credential Engine and includes a full national registry search within the Alabama Talent Triad experience should individuals seek to explore opportunities outside of Alabama.

As state policy leaders consider the aims and objectives of their efforts to bring transparency, quality, and functionality to the credential ecosystem through credential registries and LERs, they should understand the key to scale and success of these platforms is to ensure they are actionable.

This requires a commitment to interoperability, recognizing that credential registries and LERs need to interact with many contributors and systems ranging from education and training providers to licensure and certification providers to employers to support verification. The Digital Credentials Consortium notes, “merely digitizing academic/university credentials alone does not bring enough value to employers for them to show much active interest in them.” Interaction with employer-facing systems is important to gain employer buy-in and create intelligence that connects education and workforce outcomes, as well as value for jobseekers.
Consider how interoperability and comprehensive approaches to registering credentials with skills can drive increased transparency, quality assurance, and efficiency in state mandates to align education and workforce across agencies. For example, many states have adopted committees that are responsible for providing credential and skills insights connected to industry needs. Alabama utilizes its Committee on Credentialing and Career Pathways (ACCCP), which is supported by 16 Technical Advisory Committees that serve as industry sectoral partnerships and are focused on industry and regional needs. The ACCCP was codified by Act 2019-506, and it produces regional and statewide list of in-demand jobs annually, occupational competency models, and dynamic career pathways. The criteria approved by the ACCCP is used by the Alabama Committee on Credential Quality and Transparency (ACCQT), codified in 2023 by Act 2023-365 to evaluate all the credentials registered to the Alabama Credential Registry against the ten non-degree credential quality and transparency criteria. No committee can manually review hundreds or thousands of credentials and/or have comprehensive insight into how specific credentials connect to particular jobs. Using the Alabama Credential Registry and insights emerging from the Talent Triad, Alabama will be able to streamline and enhance the work of these committees. States may also benefit from improved articulation agreements and academic program design.

Understanding how to select and partner with organizations and technology vendors to provide verification support and services is also essential. Further, state leaders should recognize the increased value in creating a common competency ontology to underpin credential transparency as well as the value verification of skills and competencies can create for end-users, including learners, jobseekers and employers alike. The Competency-Based Education Network (C-BEN) supports the Alabama Talent Triad in advancing a skills- and competency-based approach, while EBSCOed provides technology infrastructure and services to power the platform. Both organizations are eager to work with states to help them adopt emerging best practices and to consider their options for building LERs and Credential Registries that enable skills-based hiring and effective upskilling.

We encourage you to reach out for more information. Please visit www.talentplaybook.org for forthcoming briefs and resources charting the work of the Alabama Talent Triad.

The Education Design Lab produced a design manifesto, Skills Visibility: Why and How a Skills-Based Economy can be More Equitable.

Brookings Institution produced a report entitled “Going digital: How learning and employment recordsshape access to quality education and jobs” that provides an effective framework for implementation and highlights the role of interoperability in effective implementation.

Credentials to Employment: The Last Mile from the Digital Credentials Consortium highlights the role of interoperability in creating incentives and value specifically for employers, noting,

CNM Ingenuity’s Blockchain Center of Excellence and partners produced A National Learning and Employment Records Infrastructure: Progress Towards a Skills Economy, which underscores the need for interoperable skills-based records that enable “an individual’s lifetime cradle to career skills-building journey.”
The US Chamber Foundation supports the Jobs and Employment Data Exchange, JEDx, a data standards based approach for improved signaling and reporting on job openings and position descriptions.

National Skills Coalition provides ongoing leadership in supporting states to adopt high-quality credential criteria. In this brief, NSC describes how six states, including Alabama, are using criteria to advance their goals. The reports linked in this blog provide insights into quality criteria and state policy actions for improved credential quality and transparency.