



ALABAMA  
Talent Playbook



**Interoperability**

# Interoperability

**Scaling Statewide  
Talent Development Systems:  
the Alabama Model**

# Building a Talent Marketplace



## Building a Talent Marketplace—A Playbook for States

Alabama’s Talent Triad is a unique system, bringing together often disparate efforts to create value and impact for the state’s workforce and economy. Driven by Alabama’s government and its goals of adding 500,000 additional credentialed workers to the state’s economy and surpassing the national labor force participation rate by 2025, the Talent Triad represents a comprehensive skills-based talent marketplace that connects job-seekers, employers and education providers.

There have been several states taking the first step to transform their economy to a currency of skills by implementing skills-based hiring approaches for state employees. This is a positive step toward alleviating government hiring and recruiting challenges. But we know this is not enough to result in economic mobility and prosperity across the state, and more action will be needed to create skills-based talent marketplaces that connect all workers, career opportunities, and learning experiences to power economic growth and the mobility of its citizens.

Alabama state leaders understood this problem deeply and used evidence to drive towards the creation of the Alabama Talent Triad, which is the first skills-based talent marketplace facilitated by a state in the US. To share about this important effort, partners have created The Alabama Talent Playbook, which provides details for how the state is building a skills-based economy and allows other state leaders to learn how Alabama’s Talent Triad has emerged as the most promising transformational talent marketplace in the country.

## Alabama’s Talent Marketplace: Technology and Data Tools for the People of Alabama

The Talent Triad is a public-private partnership, sponsored by Governor Ivey’s Office of Education and Workforce Transformation and AlabamaWorks! to easily provide access to information about jobs, credentials, and job seekers in an online talent marketplace. Unlike many other efforts where states are deploying technology to gather and connect workforce and education data for state-level research and reporting, the Talent Triad was not built to serve the state..

**The Talent Triad was designed to serve citizen stakeholders and facilitate the success of:**

- Job-seekers and working learners who wish to apply their skills in a new or advancing role
- Employers who seek to find talented Alabamians to fill in-demand jobs
- Education providers working to train and build Alabama’s talented workforce

# Building a Talent Marketplace

While the state will benefit from the insights gained from stakeholders using the Talent Triad and from the impacts on labor force participation and employment, the state is not the primary beneficiary. Instead, Alabama is making a big bet, leveraging public data and infrastructure, philanthropic support, subject-matter expertise, and private sector know-how to create a truly unique talent marketplace to serve its people.

The Alabama Talent Triad engages 19 state agencies in a common vision and collective work to build an ecosystem where technology and data can support the growth of skills-based hiring and competency-based education in order to increase credential completion and labor force participation.

## **The Talent Triad is composed of three segments, each of which creates value:**

- The Alabama Credential Registry is an online resource that enables Alabama education and training providers to register the credentials they issue, including certificates, licenses, degrees and non-degree credentials, creating a real-time outlook for the full array of credentials available to learners in the state. Unlike other credential registries, Alabama's goes a step further to describe the competencies that learners gain in completing these credentials. That work is organized through the state's Competency Ontology, and results in what the state calls the "DNA" for in-demand jobs--the skills and knowledge that drive in-demand jobs.
- The Alabama Skills-Based Job Description Generator and Employer Portal allows employers to create customized job descriptions based on the skills "DNA" of the jobs in their firms. Employers can use the Skills-Based Job Description Generator to more easily transition their existing descriptions into skills-based job descriptions, and to post jobs so they can be matched with potential employees.
- The Alabama College and Career Exploration Tool, or ACCET, is Alabama's version of the new Learning and Employment Record (LERs) and allows students and job seekers to own, collect, and manage their records of verified skills, credentials, and experiences in a digital wallet to easily share and link directly to skills-based job descriptions generated by employers. Job-seekers can tailor their LER to specific roles and fields, and are in full control of their own credential and competency data.

Because all aspects of the Talent Triad use the same competency-based "DNA", job seekers and employers can be "matched" based on the alignment of skills. The LER is valued by employers because it eliminates cumbersome background checks to verify credentials and offers discrete information about what a job candidate actually knows and is able to do on the job. Both saving time and money for on-boarding new employees, and providing Alabamians a more direct path to careers. If the job seeker is not qualified for a job, they will receive learning recommendations to an Alabama education or training provider to support their skill and credential development to qualify.

# Building a Talent Marketplace

## Call To Action

Triad team will continue to scale while also exploring new integrations and ways for the data to be interoperable to the ways job seekers and employers seek to create economic growth and individual mobility.

We invite you to learn with us. We will release multiple chapters through the Alabama State Playbook, designed specifically to share lessons learned and emerging best practices. The Playbook is specifically designed to support state policy and implementation teams as they address talent in their own states. Papers will be posted periodically at [www.talentplaybook.com](http://www.talentplaybook.com)], as well as through social media and other venues.

**We invite you to connect with the Alabama Talent Triad team to learn and to explore how this work can support transformation in other states.**

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# Summary

**No workforce or education digital tool that seeks to facilitate mobility can succeed if it operates in isolation. Interoperability, the ability of data systems to work together, exchange, and make use of information from other systems, is the key to success, scale, and impact.**

The same is true for Learning and Employment Records (LERs), which use open data standards in order to be portable, verified records of an individual's education and work-based earned skills, credentials, and experience. LERs are designed to free education and workforce data from static resumes, proprietary systems, and education providers' file cabinets, ensuring smooth transfer of data between education providers, employers, and learners.

The Alabama Talent Triad has been centered on interoperability from the outset. This brief provides insights into the design of interoperable systems, highlighting effective approaches taken by the Alabama Talent Triad.



# Key Takeaways

**The application of LERs is vast—they can be used for job applications, upskilling, reskilling initiatives, advancement strategies, education planning, recognition of learning for credit, and other ways we have not yet considered—but only to the degree that LER platforms can integrate and align with other systems.**

The Alabama Talent Triad was built to host an open talent marketplace where residents can easily access education and training connected to family-sustaining jobs. By combining data from the state's K-12, community college, university and workforce training systems, the Talent Triad is intentionally designed to integrate with Alabama's skills-based job description generator as well as through leading human resource information systems. This openness enables seamless access for students, job-seekers, educators, and employers to easily connect and share information across systems that were previously siloed.

Connecting multiple data sources creates value for stakeholders, including learners, employers, education providers, and the state. Connecting multiple data sources drives opportunities to create more tailored and curated experiences for end users. By linking together skills, competencies, credentials, learning recommendations, and job postings, the Talent Triad is a talent marketplace that allows users to see a much fuller picture of opportunities and candidates that have not been previously discoverable with non-integrated systems. Furthermore, the connection of this data across systems enables intelligence gathering that can solve systemic problems and build comprehensive solutions.

The Talent Triad's commitment to open standards and interoperability reflects its commitment to the platform's users: students, job seekers, employers and education providers, which ultimately creates public good for the state of Alabama. While led by the government, the Talent Triad creates value for individuals. The platform is not a data system

# Key Takeaways

that has utility for some groups, or even primarily for the government—it is an intentionally designed tool that drives results for citizens, businesses, and education, all while generating learning and insights for the public good.

Committing to interoperability principles will drive improved:

- **Portability**—Interoperability allows individuals, wherever they are on their learning journey, to carry their skills, competency, credential and employment records with them, ensuring records are not trapped inside separate systems or institutions.
- **Efficiency**—Interoperability, while requiring effort at the outset, will ultimately create efficiencies within systems as data is exchanged seamlessly. It may eliminate the need, for example, for fulfilling transcript requests or conducting separate verification of credentials by employers.
- **Accuracy**—Interoperability improves accuracy and reduces fraud, eliminating the risk of data errors and intentionally misleading information finding its way onto resumes and job applications.
- **Continuity over time** - Interoperability supports lifelong learning, enabling learners to aggregate a holistic record of their learning and employment over time.
- **Connectivity across sectors**—Interoperability drives improved collaboration and connection across systems, enabling state and public-facing actors to see trends, gain insights and build intelligence that standalone data systems cannot.
- **Equity**—Interoperable systems enable information and data that may be locked behind administrative processes or fee-for-service engagements to be managed by individuals at no cost, allowing those who have low incomes or no access to credit or banking to participate.



**Interoperability is defined as the ability of systems, devices and applications to work together, exchange and communicate information, and importantly, to do those without any additional effort by the end user. A product or application is interoperable if it creates a seamless experience that does not require users to repeat actions, open multiple programs, or use parallel systems.**

Within LERs, interoperability efforts drive multiple objectives:

- Collect and verify information across different systems and institutions which are often siloed and operate in different sectors, industries, geographies and administered with different data systems
- Allow learners to accumulate data and information into their LER over time
- Enable multiple entities, including learners, job seekers, education providers, employers and other stakeholders to contribute to and verify learning and employment records, regardless of their size, sector, geography, and technical capacity

The Alabama Talent Triad was conceived as a platform for integrating high-quality credential data, skills-based job descriptions and postings, and verified digital resume(s) and skills profile data from Alabama's education systems & employers. This structure effectively brings together disparate systems, which creates value without requiring additional effort by end users.

# Issue Overview

The Talent Triad approaches interoperability across multiple dimensions. It is, by design, a “headless” digital wallet that works across sectors and systems and is not owned by any one entity. Frequently, LER efforts prioritize sharing directly from data source to the digital wallet, enabling learning and work experiences to show up in individual records. The Triad does this and more, considering interoperability across four perspectives:

## **Education and Training Providers**

The Talent Triad connects in real time with Alabama institutional student information systems such as the Community College System’s Banner Student Information System (SIS), among other systems, enabling employers to see a real-time talent pipeline emerging from the state’s education systems at all levels of education.

## **Self-Attested LER Contributions**

Learners can self-attest, or submit their own learning experiences, for inclusion in their digital wallets, including the ability to import learning experiences through platforms like Open Badges and military joint service transcripts via MilGears into their records.

## **Partner Interoperability**

The Talent Triad links to the Credential Engine Registry Search, maintaining a real-time accounting of available credentials from the national Credential Registry. The Talent Triad also has the ability to import and/or integrate existing learning and employment records from outside of Alabama. Finally, the team is building partnerships with leading student and human resources information systems as well as additional training provider verification systems.

## **Standards Interoperability**

The Talent Triad is capable of exporting and importing credentials, records and other data factors from multiple sources. All job and credential records are openly-linked data and share key skills vocabularies.

# Issue Overview

The Competency-Based Education Network released a [statement of interoperability principles](#). These principles are a framework for shared action in advancing LERs that achieve their fullest potential. In many ways, the Talent Triad exemplifies best practice across the interoperability principles.

## Open Standards

Open standards in technology are requirements or criteria for technical tasks and processes that are open and accessible to anyone. An example of an open standard is wifi access, where wifi from any source can work with any wifi-enabled device, regardless of the location, owner or service provider.

- The Talent Triad is built using open standards and is effectively able to connect to any other data platform using those standards. Every component of the Talent Triad uses existing open data standards. Furthermore, while the Talent Triad is launching in Alabama, nothing in its design or application precludes employers, learners and stakeholders from other states from joining the platform, or for learners to take their data with them should they wish to use a different platform.
- The Talent Triad adopted open standards that represent best practice for today, and prioritize the exchange of data between systems.

## Privacy and Security

Interoperable systems provide exceptional access and ease of use but never sacrifice privacy or the security of users' data.

- The Talent Triad enables users to control their own data. Individuals can share all or none of their information, presenting curated, tailored information to employers based on their individually-curated digital resume(s), which they can align to skills-based jobs.
- Verified data is secure. The Talent Triad connects with other data systems through real time Application Programming Interfaces (APIs), including student information systems and enrollment management systems. Because data is coming directly from education providers, it is fraud-proof and 100% verifiable.
- Digital wallets populate with verified data only when a learner/earner is active on the platform and at the user's discretion. No verified learning and employment data is permanently housed within the application client.

## Unlock Learning Everywhere

Interoperable learning and employment records are able to connect to and include records of learning from all venues, from classrooms to military experience to on-the-job.

- The Talent Triad enables any qualified entity to validate an individual's credentials, competencies, and employment. While early efforts prioritized competencies gained through Alabama's K12 system, community colleges, and workforce system, future plans integrate military learning and enable employers to verify learning gained through work.
- Learners and workers, especially those who attend more than one institution or who stop and start on their education journey, benefit from the seamless collection of academic, employment, military and other records, regardless of where they live, where they studied, or their current circumstances. Interoperable learning and employment records also enable seamless sharing of these records with employers, securely, efficiently and without bias.

## Universal Access

Effective and interoperable platforms are built with the end user in mind, and enable any user to access their information. Interoperable platforms do not require special access or skills. They also put control of individual data firmly in the hands of individuals.

- The Talent Triad - the functions the platform fulfills and insights it creates for users - is built on the EBSCO Stacks platform, a web-based content management system founded with a particular user audience of library patrons. The company has conducted extensive user experience research over the years with all levels of technology comfort, creating tools that can enable browsing and searching of complex, extensive data information systems that resonate with every type of user. The platform can be used with basic digital skills, and operates in ways that most users with those skills are familiar with if they are using common online accounts.

# Issue Overview

## Alignment

When public, private and non-profit organizations and agencies collaborate, each committed to interoperability, learning and employment records can reach their maximum potential.

- The Talent Triad serves three primary audiences: learners and earners, employers, and education and training providers. But the Talent Triad engages more than a dozen public agencies and entities that have all aligned behind the open standards and interoperability principles that power the platform. Led by the Alabama Governor's Office of Education and Workforce Transformation, multiple agencies including the State Department of Education, the Alabama Community College System, AlabamaWorks!, and the State Office of Apprenticeship collaborated to share data and maximize the benefit of the platform for learners, employers, and educators.

## Public/Private Partnerships Creating Public Good

Interoperable learning and employment records balance benefits for stakeholders, prioritizing those benefits that will create the greatest public good. Effective platforms are both scaled and regulated to ensure all stakeholders continue to benefit, and leverage, the unique attributes of all sectors.

- The Talent Triad is a unique model, led by state government, powered by private industry, supported by non-profit, leveraging data from public education providers, and operating with initial financial backing from philanthropy. This mix of actors, which enabled appropriate risk-taking, guaranteed connection to public data systems, engagement of the private sector, and deep partnership with education systems, resulted in a comprehensive effort that is working to solve systemic problems for all involved.

# Issue Overview

## Global Mobility

Interoperable learning and employment records have the benefit of being applicable in any geography, industry or environment. Effective systems are not trapped by their technology, applicable only in certain states or unable to work at local, state or regional levels.

- The digital wallet component of the Talent Triad is “headless,” meaning it can live anywhere. No single entity in Alabama “owns” the platform, and as a result, no single stakeholder’s priorities are elevated over others’.
- The Talent Triad launched in Alabama in April 2023, and is prioritizing Alabama learners and employers in its pilot phase. However, over the long term, the Talent Triad’s technology, built on open standards, can apply or be used anywhere there are learners, education providers or employers interested in upholding those standards and sharing the benefits of learning and employment records.

A north star goal facilitated by these interoperability principles is a national system in which a digital wallet would follow a learner anywhere in the country. While the data and tech systems needed to operate on that scale are still being developed, the Talent Triad is a best practice model for reaching that goal.



# Action Items

**Reach out to partners in the field, and consider leveraging an existing platform to complement your work. The state of Alabama is interested in partnering with states and organizations that are committed to interoperability, maximizing the benefits for learners, job seekers, education providers, and employers across state and regional boundaries.**

For actors with existing learning and employment records under development or in operation that use principles of interoperability, share your story. Tell others about how your work has benefitted from commitment to open standards and your efforts to work across systems and sectors.

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

# Research and Resources

- The Competency-Based Education Network released [Interoperable Learning and Employment Records](#), laying out the key principles for creating accessible, transparent records.
- [T3 Innovation Network](#), led by the US Chamber of Commerce Foundation, promotes data interoperability within the talent marketplace. The T3 Innovation Network hosts a wealth of tools and resources on the [T3 Network Hub](#), including a working network for Data and Technology Standards and for Jobs and Workforce Data.
- The [Open Skills Network](#), an initiative of Western Governors University, supports a national skills infrastructure that would eliminate silos between sectors and organizations and advance skills as a sharable, interoperable currency.
- The American Workforce Policy Advisory Board Digital Infrastructure Working Group produced a [2020 white paper](#) recommending key steps and practices for advancing Learning and Employment Records.
- The American Workforce Policy Advisory Board Data Transparency Working Group produced a [2019 white paper](#) on Interoperable Learning Records, providing an early foundation for efforts to link data across systems.
- Brookings Institution produced a report entitled “[Going digital: How learning and employment records shape 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, “merely digitizing academic/ university credentials alone does not bring enough value to employers for them to show much active interest in them.”
- [Hire Standards: A Hiring & Advancement Playbook](#) from Learning Economy Foundation emphasizes the role of open standards to improve hiring and advancement systems and practices.
- The [Wellspring Initiative](#), led by IEdTech, includes a series of resources, tools and case studies that aim to accelerate the adoption of an education-to-work ecosystem based on open technology standards.

The logo features a stylized 'A' composed of overlapping geometric shapes in shades of red and white. 

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