

Policy Brief

January 2021

Credential Transparency & P-20W Data Systems

Aligning Education and Employment
Information to Meet State Talent Goals

Six state leadership organizations and five workforce, education and data advocacy/technical assistance experts have come together to build awareness, understanding, and demand for how policy can integrate credential transparency into education and workforce development state strategies. This brief is one amongst a series of policy briefs that explore the ways that credential transparency can be supported, integrated, and leveraged within states. These briefs stem from the thought leadership of these organizations to extend the recommendations found within the [*State Roadmap and Action Guide for Transparency*](#).

Specifically, this partnership:

- Builds awareness among state policymakers around the importance of credential transparency to their own state workforce and education goals and strategies;
- Elevates a common language about credentials for use in state policy;
- Increases demand among policymakers for credential transparency; and
- Provides specific actions policymakers can consider using to support integrating credential transparency into their larger human capital development efforts.

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For more information on the State Policy Partnership or Credential Transparency, please contact Scott Cheney, CEO of Credential Engine, at 202.257.0279 or scheney@credentialengine.org. For general inquiries please contact info@credentialengine.org.

Acknowledgements

The rich partnership between these state leadership, workforce, education, and data advocacy organizations has greatly shaped the ideas, priorities, and practices shared across the various policy briefs in this series. We are grateful for the time and dedication these organizations have devoted to ensuring we can gather and provide greater access to timely, reliable, and transparent credential information. This also includes the significant contributions of Whiteboard Advisors who have helped to coordinate and advance this work. Through your combined thought leadership and expertise, we have created useful resources that others can apply within their contexts to work towards greater credential transparency.

We especially want to recognize Jane Clark, Associate Director for Policy and Advocacy at Data Quality Campaign, and Claus von Zastrow, Principal at Education Commission of the States, for their direct input in shaping this policy brief. Your collective guidance and leadership are both needed and appreciated as we work to map the credential landscape to make it easier for people to find pathways to new opportunities and meet state needs.

Finally, thank you to Washington State for serving as an example that demonstrates how credential transparency promotes alignment between education and employment data to help meet larger state goals. Their commitment to credential transparency has helped coordinate data from state policy leaders to connect various initiatives across the state and help inform decision-making.

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Credential Transparency & P-20W Data Systems:

Aligning Education and Employment Information to Meet State Talent Goals

Over the next decade, employers will need to fill millions of jobs that require higher-order thinking skills, specialized knowledge, and education or training beyond high school. For that reason, many states are aiming for 65% of residents to hold high-quality postsecondary credentials by 2025. Hitting that goal depends on whether states can close gaps in educational attainment, align what's taught with labor market needs and increase racial and ethnic diversity in key industries.

While state leaders are under increasing pressure to make sure education and training programs prepare students for jobs in their local economies, the information that is needed to guide learners to and through education and training opportunities is scattered and sometimes wholly unavailable. When faced with the need to acquire new knowledge and skills, we know learners and workers have limited time and resources to sort through myriad information about pathways to jobs that provide a living wage.

Moreover, the credentials people can earn – degrees, certificates, certifications, occupational licenses, apprenticeships and other qualifications that signal mastery of a field – don't always align with the specific skills and training employers seek. The pandemic and emerging recession have made policymakers realize the importance of aligning credential attainment with the real-world demands of the marketplace. That's why a growing number of states are linking education and workforce efforts by leveraging data systems that span early childhood education, K-12, postsecondary education and the workforce. Leaders believe these comprehensive data systems will improve how education and training programs prepare residents for the jobs of the future.

Yet, these systems cannot realize their promise without "credential transparency." A cornerstone of transparency is using a common language to describe credential information in a way people can understand. Another key is the act of publishing – in formats humans can read and machines can act upon – essential information about credentials, including the skills and competencies that make up a credential, along with quality, costs, pathways, transfer value and connections to jobs.

Understanding credentials and all they entail helps states make inefficient labor markets more efficient. According to Credential Engine's most recent report, there are nearly 740,000 unique credentials in the U.S. alone – a confusing ecosystem for students, hiring managers, educators and policymakers alike.

What Is a Credential?

Credential Engine uses the term "credential" broadly to refer to diplomas, badges, certificates, apprenticeships, licenses, certifications and degrees of all types and levels. Each credential represents unique competencies that signal what a holder can do in the workforce.

Credential transparency is based on the premise that the easier it is to access and use comparable information about credentials, the easier it is for people to find the most cost-effective way to learn the right skills to find the best jobs.

What Is The Value of a P-20W Data System?

P-20W data systems help policymakers and other key stakeholders answer complex questions about education and workforce pathways. Many [states](#) already use P-20W data systems to support complex data analysis across systems that [align](#) information about workforce development with data on early childhood, K-12 and postsecondary education. Such systems make it possible to follow students' progress from early childhood to career and identify critical transition points where interventions can prevent students from leaving pathways to the most rewarding credentials and careers. At their best, P-20W data systems help state leaders build a culture where students, parents, educators, policymakers and other education stakeholders receive the information they need to make good decisions.

Why Is Credential Transparency Critical in a State P-20W Data System?

The phrase “credential transparency” refers to making public – in formats humans can read and machines can act upon – essential information about credentials, such as their competencies, quality, costs, pathways, transfer value and connections to jobs. It's based on the premise that the easier it is to access and use comparable information about credentials, the easier it is for people to find the most cost-effective way to learn the right skills and find the best jobs.

States can achieve credential transparency by linking the information with their P-20W data systems. That gives policymakers a real-time framework for aligning state education systems and labor market needs. When state data systems include well-organized information about credentials, state leaders can understand and evaluate how well each credential supports pathways into rewarding jobs.

Such systems enable leaders to identify and support credentials that equip students with skills that employers demand, help providers design such credentials and adapt policies and direct resources when the labor market demands new or different skills.

Data systems that include detailed information about credentials can also help leaders in K-12 education understand how well they are preparing their students to

What Is a P-20W Data System?

A P-20W data system securely brings together specific data to help enable leaders, practitioners and community members to understand education opportunities and pathways. Key sectors include;

- early childhood
- K-12
- postsecondary
- workforce

select, and thrive in, programs of study that are most likely to confer credentials with value in the labor market. Are there inequities in access to such credentials? Are K-12 students gaining the prerequisite credits they need to enroll in high-demand programs?

For states working toward credential transparency, P-20W data systems become allies for policymakers who wish to connect student data across four key sectors. These data systems can include critical information about credentials and, in turn, provide stakeholders with findings that inform policymaking and ensure that learners leave education and training programs prepared to meet the needs of the state's economy.

Using a Common Language to Link Credentials with P-20W Data Systems

Many states have made strides in linking their credential and P-20W data systems. But an interconnected system alone won't unite learning and working ecosystems. In fact, many P-20W data systems can't "talk" to other systems. For that to happen, the systems need to be interoperable, which means they can securely and seamlessly exchange data with one another. A common language can promote interoperability – that's how Expedia, Kayak, Travelocity and others use and exchange information.

Not dissimilarly, many states have been adopting common statewide K-12 course lists or taxonomies – often linked to a list of national course codes – to promote more transparency and consistency in how courses are described and catalogued. These common course codes make it possible to determine statewide which students have (or lack) access to vital courses and who is taking those courses, pinpoint possible inequities and more. The common codes also make it possible to examine which courses best prepare students to thrive in postsecondary education and work. CTDL, as a common credential language, can work the same way for credentials.

Just linking and sharing data across various education and workforce systems doesn't create an environment for change. Stakeholders – most notably students and workers – need modern tools to access information and compare data if they're to make informed decisions.

Think about purchasing an airplane ticket or mapping a route to the store. Open data systems on the web enable a platform like Expedia or Google Maps to get travelers where they want to go most efficiently. The same should be true for connecting people to education and work. Enterprising developers in the public and private sectors could [use the CTDL and the Registry](#) to create custom portals and applications that help users make informed decisions, identify pathways from education to good jobs and ensure equitable access to opportunities.

What Is the Credential Registry?

It's a cloud-based library that collects, maintains and connects information on all types of credentials – from diplomas, badges, certificates and apprenticeships to certifications, licenses and degrees of all types and levels. The Registry holds detailed information in an easily accessible format. Users, including employers, job seekers and students, can explore competencies, learning outcomes, up-to-date market values and career pathways.

State Spotlight: Washington

In Washington State, two comprehensive statewide efforts underscore the commitment to and coordination of data from state policy leaders – and the opportunity to connect these data initiatives.

First, the [Education Research and Data Center](#) (ERDC), which is housed in the state's Office of Financial Management, builds and maintains the state's P-20W longitudinal data system. The ERDC engages stakeholders ranging from policymakers, principals and superintendents to university leaders and academic researchers. ERDC researchers develop powerful analyses of learning that can ultimately improve student outcomes from higher graduation rates to higher wages. Partnering agencies and Washington higher education institutions share the ERDC's data, using it to conduct research and inform policy and decision-making.

Second, in an effort to make detailed information about the state's thousands of education programs more transparent and accessible to students, employers and workers retraining for career advancement or better jobs, the Washington Workforce Training and Education Coordinating Board (Workforce Board) has partnered with Credential Engine to publish over 6,500 credentials from the agency's [Career Bridge](#) site to the Credential Registry. Career Bridge is a free, public-facing website that helps middle and high school students explore education and career options, find out how much jobs pay and evaluate performance results by looking at the earnings and employment rates of recent graduates – as well as adult workers looking to retrain – to explore education and career options. Publishing this data-rich information to the Registry broadens the platform for thousands of the state's education programs by making this information more easily available and linkable outside of Career Bridge. In 2021, Washington employers will help make labor market information linkages between education and careers even more transparent when they begin providing job title information for all of their employees. This is a new requirement in Washington and will help the state more accurately track whether a particular credential leads to a particular career. Right now, the state is able to tell the broad industry area where residents work but cannot pinpoint which credentials connect directly with individual careers. Once occupational data from businesses is collected and analyzed, it will be published to Career Bridge, helping Washingtonians make even more informed choices about their education and training options. That information will then be posted by the Registry. Washington is just the third state in the nation to collect occupational data.

In addition to making this information more accessible through the Registry, the Workforce Board also created and led Washington state's first ever Credential Transparency Advisory Committee, comprised of higher education representatives who offered recommendations for greater statewide credential transparency. Ultimately, the Advisory Committee recommended continuing to identify opportunities to infuse credentialing transparency into other efforts. One effort that is likely to have a large payoff for transparency is strengthening the state's P-20W data system, so that it's clearer whether students who move through the state's K-12 system connect with further education and careers. Within that larger question about education attainment is what kind of credentials Washington residents earn and the skills and competencies within those credentials.

As policymakers know all too well, states have a lot of data, much of it is in different silos. Many are already linking this disparate data through P-20W data systems, which support smarter policy decisions.

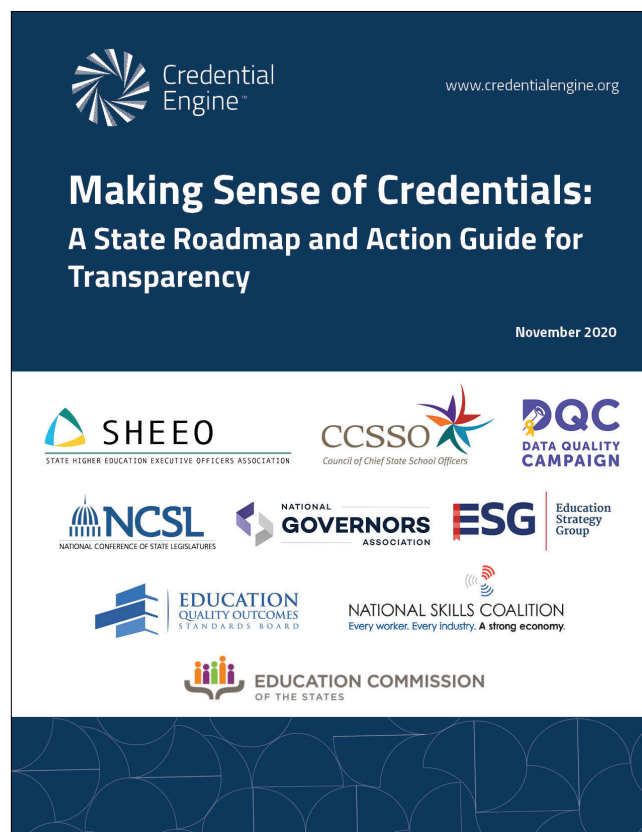
But today, as in Washington, states can take the next logical step by making those data accessible through the common language of CTDL. They can also use the Credential Registry to house essential information about skills and competencies in a public space. This comprehensive alignment ensures that information is more transparent, user-friendly and actionable for policymakers, employers, educators, learners and job seekers.

How Policymakers Can Take Action

Credential Engine's *State Roadmap and Action Guide to Transparency* is a comprehensive guide for making credential transparency a priority in state policy. The *Roadmap* was developed in collaboration with national policy experts and organizations and provides policymakers with actionable steps on integrating use of linked open data and the CTDL with their P-20W data systems. The *Roadmap* also offers information on building an open marketplace for information about in-demand credentials and where to earn them.

State policymakers who want to make existing data more transparent and actionable should:

- Identify the key question(s) a P-20W data system should be able to answer about the value of credentials in the marketplace.
- Prioritize connecting data systems in ways that enable stakeholders to get answers to those key questions.
- Show how credential transparency and linked open data can help deliver credentials of value and quality to the workforce.
- Adopt the CTDL to describe all skills and content knowledge in education and workforce efforts.
- Populate the Credential Registry with all credentials offered in their state.
- Encourage employers to adopt linked open data in job listings describing the skills and knowledge employees need.
- Make sure data are presented to users in formats they can understand and on tools and services they can access and use.



- Set policy for state agencies and all training and education providers and employers to make information on credentials open and accessible.
- Use governance to ensure that credential information from postsecondary institutions and training programs are added into P-20W systems to meet state goals for educational attainment.
- Invest in feedback reports for decision-makers to understand whether key priorities are being met through the P-20W data system.
- Advocate for legislation that makes information about all credentials publicly accessible and fully interoperable.

It's possible for states to have full transparency about both the skills needed for success in the job market and the credentials that signal competence and readiness for those jobs. But it only will happen if states employ better workforce and education data through P-20W data systems and adopt new technology that enables the data to be analyzed and made actionable.

If you would like more information regarding the contents of this brief, the overall State Policy Partnership, or about Credential Transparency, then please contact Scott Cheney, CEO of Credential Engine, at scheney@credentialengine.org.

Glossary

Credential: diplomas, badges, certificates, apprenticeships, licenses, certifications and degrees of all types and levels that represent unique competencies that signal what a holder can do in the workforce.

Credential Registry: a cloud-based library that collects, maintains and connects information on all types of credentials – from diplomas, badges, certificates and apprenticeships to certifications, licenses and degrees of all types and levels. The Registry holds detailed information in an easily accessible format. Users, including employers, job seekers and students, can explore competencies, learning outcomes, up-to-date market values and career pathways.

Credential Transparency: making essential information about credentials public in formats humans can read and machines can act upon – such as their competencies, quality, costs, pathways, transfer value and connections to jobs. It is based on the premise that the easier it is to access and use comparable information about credentials, the easier it is for people to find the most cost-effective way to learn the right skills and find the best jobs.

Credential Transparency Description Language (CTDL): An open-source language that lets states catalog, organize and compare credentials with uniformity, making it easier to match educational programs with careers.

P-20W data systems: Infrastructure that securely brings together specific data so leaders, practitioners and community members can better understand educational opportunities and pathways. This includes key sectors of the education to workforce pipeline beginning with early childhood education and transitioning through K-12, postsecondary education, and ultimately the workforce.



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Credential Engine is a non-profit whose mission is to create credential transparency, reveal the credential marketplace, increase credential literacy, and empower everyone to make more informed decisions about credentials and their value.