In the face of enrollment declines and competing education and workforce priorities, the need has never been greater for clarity in our training and workforce systems and alignment in education to employment pathways. Recently, state leaders have begun aligning skills and competencies in credential programs with workforce and economic needs, which supports a growing emphasis on skills-based hiring. There are almost 1 million credentials in the United States, but there is little consistency in how information about those credentials is collected and communicated. State leaders continue to have questions about quality, education and industry partnerships, and barriers in training and workforce pathways.

Existing policies that require the collection or consideration of credential data are created in a disjointed way and, in many cases, states have not made information about credentials easily accessible to local, state and national stakeholders. This gap in available information is an obstacle for learners trying to attain of credentials of value. States are working to streamline a complex landscape of education and training options to increase access to high-quality pathways. Without comprehensive data on credentials offerings and training providers in a state, it is challenging for individuals to navigate a disjointed system to make informed decisions that support positive career outcomes.

**Credential Transparency** means that essential information about credentials — including associated skills and competencies — are public, easily accessible and actionable. This way credentials can be better understood and pursued based on what it takes to earn them, what they represent and the jobs they can lead to. Credentials include diplomas, badges, certificates, certifications, licenses, apprenticeships, and degrees of all types and levels.

- Credential Engine
Credential transparency provides a way forward for comparability, analysis, clarity and accessibility. It provides a common data infrastructure that helps translate different credentials across states and institutions. It also allows for a more comprehensive understanding of all training providers, credentials, competencies, transfer value recommendations, quality frameworks, outcomes and pathways into the workforce for state leaders, learners and employers.

States play a key role in advancing credential transparency and connecting training with workforce needs. Credential transparency can help states identify gaps in existing pathways and develop coherent and stackable credential pathways that support the state’s short- and long-term goals.

In February 2023, Education Commission of the States assembled postsecondary education and workforce development experts and state leaders for a Thinkers Meeting. The goal was to consider the technical systems and data capacity necessary for credential transparency and policy options to further state goals on issues such as quality, affordability, attainment and equity.

Over the course of the meeting, participants identified key considerations for policymakers and potential action items for those interested in advancing credential transparency in their state. This Policy Brief provides policy considerations gathered from participants that states, systems and practitioners can use when implementing credential transparency.
Opportunities to Increase Credential Transparency

The scale of the existing credential landscape — in addition to the challenge of coordinating across state agencies, institutions and training providers — represents significant obstacles to credential transparency for state leaders. Different state and federal data collection and reporting requirements along with competing goals and priorities exacerbates this lack of alignment.

Policymakers have several levers available to address these challenges and advance credential transparency through legislation, regulatory changes, executive orders, system policy or other task forces and commissions. Over the course of the meeting, participants identified opportunities for policymakers to overcome obstacles. These opportunities fell into three priority areas:

1. Data Capacity
2. Governance
3. Funding

Increasing state data capacity to collect and report meaningful data on credentials was elevated as a foundational policy lever and a potential first step for states pursuing credential transparency.

Stakeholder Engagement

Participants emphasized the importance of meaningful stakeholder engagement as a key component and strategy in each priority area. Establishing and leveraging credential transparency requires meaningful cross-sector collaboration to align state initiatives across agencies and governing bodies. Including learner and employer voice was highlighted as an important element of stakeholder engagement to ensure that state postsecondary education and workforce goals and systems are designed to meet the needs of individuals and communities.
Data Capacity

Connected, cross-agency data and effective use provide an essential throughline for credential transparency. Clear, up-to-date and easy-to-understand information on high-quality credentials and outcomes can support learners, institutions, employers and workforce programs in career efforts. State leaders can foster a robust data infrastructure and support an ecosystem of data sharing. In seeking to bolster state, system and institutional data capacity to support credential transparency, state leaders may focus on policy levers related to data collection, sharing and reporting.

Data Collection

Participants suggested state leaders consider establishing a concrete vision for which data they collect and how that data will be used. Without a clear and coherent plan for how data may be used, states risk mapping out data that lack meaning and fail to contribute to broader efforts or goals. Data systems can often be geared solely toward compliance with various collection requirements, ultimately limiting the intention of data use. A unified vision can help fill in data collection gaps to meet student, institutional and state needs. Within a vision, leaders can provide clear messaging around what data can and cannot do.

With a vision, state leaders can take stock of data they are collecting to ensure they have what they need to accomplish state or institutional goals. Conducting a landscape analysis may allow state leaders to determine what is missing and what specific types of data or data infrastructure may be needed. From there, state leaders may adopt a common language to describe credentials and standard outcome metrics in policy, which can help prevent disjointed information-sharing across entities and provide an inventory of available credentials.

State leaders can also provide financial incentives for postsecondary institutions and training providers to increase institutional capacity to collect and report data. States may consider blending federal and state funding sources to build out institutional data infrastructure. They may also consider providing training and professional development to staff to ensure they have agency over data use. Inversely, state leaders may withhold state funding or federal funds controlled by the state if certain reporting requirements are not met.
State Example

**Florida** provides clear legislative direction for the collection of informative workforce and credential data. The [Reimagining Education and Career Help Act](https://www.legislature.state.fl.us/) includes components related to data collection and sharing that facilitate state credential efforts. The act requires facilitation and collection of data on nondegree and degree credentials of value, identified by a Credentials Review Committee, and to verify the validity of data collected for federal and state compliance.

**Data Sharing**

As the necessary data is collected across a variety of agencies and institutions, state leaders can support efforts to ensure that data is connected and integrated with existing education and workforce data efforts. To support a data infrastructure aimed at serving the user, state policymakers or system leaders can foster data sharing agreements and can provide clear guidance on compliant data sharing.

State leaders can capitalize on existing data collection by maximizing interoperability — the ability for data to be merged and analyzed together — with statewide longitudinal data systems and other sources of data. The sustainable funding and staffing seen in many statewide longitudinal data system efforts may be transferable to state credential transparency efforts. Additionally, champions of data use may serve as natural supporters of credential data efforts. Education and workforce development technologies can benefit cross-agency data interoperability when such applications have access to shared, high-quality and machine-readable data on credentials.

One current barrier to a holistic understanding of credential seekers is a lack of data-sharing among certain providers. Participants noted that tracking may not exist for students in non-credit programs in certain data systems or for individuals obtaining third-party certification or industry-recognized credentials. The group suggested that there is an opportunity to incorporate these data into state systems more consistently. To keep up with the ongoing modernization of the workforce space, state leaders may consider including a list of required data for non-credit programs and student demographics in request for proposal or contract language with vendors. State leaders could also establish reporting requirements for third-party training providers to ensure all credential seekers are represented in data-sharing practices, which would give systems, employers and states a more comprehensive view of credentials earned.
State Example

Minnesota’s Office of Higher Education and Department of Employment and Economic Development partner to use existing data infrastructure to simplify the reporting process for training providers while meeting the Workforce and Innovation Opportunity Act requirements. The office of higher education had previously collected enrollment and completion data from postsecondary institutions participating in state financial aid programs. In March 2022, the office expanded collection to include all institutions and programs on the state’s eligible training provider list, and redisclosed that data to the department and to the state’s longitudinal data system.

Data Reporting

Data experts suggest it’s vital to ensure data collection and sharing is designed to benefit end-users. As meeting participants stated, data itself does not get someone into an educational program, but rather connects individuals to programs through decisions that are informed by data. Data transparency does not define the value of credentials, but it provides valuable information to support students or credential-seekers exploring workforce opportunities.

State leaders can use information to incentivize data-driven pathway creation and the sharing of certain information with the end user, including job description and skills-based data. States can use data to understand trends in enrollment, progress and outcomes for students in various pathways. With this information, states can determine if specific pathways are effective in meeting macro goals related to workforce demand, job entry and economic mobility. States can then build a job-specific data infrastructure and create a shared skills taxonomy to match those employment opportunities with skills built through credential pathways.

“The goal is to allow the data user to chart a course in the data.”
– State Leader
Federal Policies, Funding and Data Reporting Connected to Credential Transparency.

While states can make progress in promoting credential transparency, there are some federal policies and reporting requirements in place that provide information and resources. These federal policies, programs and funding opportunities can help build greater data transparency:

- Perkins.
- Pell Grants.
- Higher Education Act.
- Supplemental Nutrition Assistance Program Employment and Training.
- U.S. Department of Labor Employment and Training Administration Grants.
- The American Rescue Plan Act.
- Infrastructure Investment and Jobs Act.
- The Creating Helpful Incentives to Produce Semiconductors and Science Act.
- Inflation Reduction Act.

State Example

In Arkansas, the Career Pathways Initiative uses federal funding to increase access to credential opportunities for parents who qualify for federal assistance or have a household income below 250% of the federal poverty level. The initiative also connects enrollment and completion data from the department of higher education with wage data from the department of workforce services to examine performance outcomes for participants. Further, the state is using federal funding to expand the state’s longitudinal data system to include a variety of workforce and training programs and associated data to better understand the skills needed across the state’s workforce landscape. This includes data from the Workforce Innovation and Opportunity Act, the Supplemental Nutrition Assistance Program Employment and Training program, Temporary Assistance for Needy Families and Work-Based Learning programs.
Data Capacity Resources

Credential Engine’s State Roadmap and Action Guide for Transparency provides in-depth information and state examples on key principles of data infrastructure, collection, reporting and use. The guide provides state policymakers with approaches for identifying necessary data, adopting a common data language, aligning with existing state postsecondary and workforce data, and building an infrastructure for data transparency.

Education Commission of the States’ Lessons in Data Governance for State Education Leaders outlines six principles for effective data use that were identified by data experts and state leaders. These include implementing a vision for data use, engaging various contributors and users, and creating methods for transparency and self-improvement.

Governance

Workforce development systems consist of an array of entities that control various funding streams with separate programmatic and reporting requirements. States have aligned the work of these entities through the development of shared workforce and education goals and often through the work of workforce boards or councils and other cross-agency collaborations. Meeting participants identified continued efforts to align governance as a key strategy to advance and leverage credential transparency.

Participants elevated stakeholder engagement as a vital component of aligned governance. Including state agencies that administer workforce and education initiatives in goal setting and planning processes contributes to more intentional and developed connection across these efforts. Participants also elevated the importance of learner and employer engagement in these processes. During the meeting, a national expert said, “opening the conversation to the different lenses that groups bring to the movement for credential transparency can improve system design and buy-in.”
State Example

**Connecticut** Gov. Ned Lamont prioritized inclusive stakeholder engagement through a 2020 executive order establishing the Governor’s Workforce Council. The council consisted of representatives from state agencies, the state Legislature, postsecondary institutions, school districts, local workforce boards, training providers, nonprofits, labor organizations and business representatives from several industries. This diverse group of stakeholders developed a strategic plan for workforce development in the state, including the establishment of a credential registry. Through S.B. 1202 (2021), the Legislature codified this recommendation and established the office of workforce strategy to support the work of the council.

This sort of robust stakeholder engagement supports the development of state attainment goals or strategic plans that are rooted in high-quality data on credentials. Participants agreed that credential transparency could be incorporated as both a goal for states and a strategy to support other state priorities.

State Example

In **Texas**, the Tri-Agency Workforce Initiative is a partnership between the Texas Education Agency, Higher Education Coordinating Board and the Workforce Commission. Gov. Greg Abbott charged the commission with developing the state’s workforce development strategy, including plans to align agency initiatives and improve data capacity. The development of a credential repository was highlighted as a strategy to improve connections between agencies and support the identification of high-value credentials. The state highlighted the strategy in the updated strategic plan released by the board that sets a goal of 60% of working-age Texans with a credential of value by 2030.

Although efforts to further align governance may support the advancement of credential transparency, it also enables inter-agency collaboration by providing comprehensive data that helps to fill existing gaps in the state credential landscape. As state leaders collaborate to develop strategic plans or outline attainment goals, the common language provided by Credential Transparency Description Language builds on a linked data system to allow for a shared understanding of the competencies and knowledge associated with various
Policy Levers to Advance Credential Transparency

credentials. This contributes to an understanding of how credentials relate or stack and allows for state determinations of quality or value in the context of their goals. Participants emphasized that states could leverage a better understanding of credentials to improve their program authorization or approval policies and bring them into alignment with a credential quality framework.

State Example

The Alabama Committee on Credentialing and Career Pathways within the state’s workforce council identifies high demand fields at the regional and state level, as well as credentials of value associated with those fields. The committee uses Credential Transparency Description Language to support development of a compendium of valuable credentials. The state requires credentials to meet quality criteria in order to be included in the credential registry or to be included on the state’s eligible training provider list.

Funding

Similar to governance, state and federal funding for postsecondary education and workforce development comes with varying requirements designed to advance different priorities. Providing a common language through credential transparency allows states to better understand alignment between initiatives and to target resources to improve state data infrastructure, support collaboration and create seamless credential pathways. Further, participants identified the importance of codifying credential transparency in investment and procurement policies. Establishing aligned application and reporting requirements in these policies can increase connectedness of various state and federal funding streams.

Participants also highlighted financial aid as another tool to implement common reporting requirements and incentivize high-value pathways and stackable credentials.
State Example

**Colorado** identifies and incentivizes stackable credentials using state funds. In 2022, the Legislature enacted [S.B. 192](#) directing the Colorado Commission on Higher Education and the Colorado Workforce Development Council to approve stackable credential pathways in high-demand fields. Stackable pathways were developed in five industries including behavioral health, computer programming/software development, cybersecurity, education and healthcare. The efforts recognize incremental achievements on the path to degree completion, organize stackable credentials into pathways and identify how credentials may be evaluated and stacked into credential pathways to increase access to employment and possible degree attainment. The legislation also established a funding program to develop or expand access to non degree credentials that are stackable, aligned to an industry pathway and in a high-demand field. The funding comes with specific reporting requirements that facilitate continued credential transparency. To support this work, the Colorado Commission of Higher Education revised its academic programs policy to clarify that all institutions have the statutory authority to offer sub-baccalaureate credentials that meet certain criteria, including applicability to one or more bachelor’s degree programs.

Leveraging funding policies to align reporting requirements with credential transparency efforts may incentivize institutional participation. However, participants noted that building capacity and buy-in across institutions and state agencies may require an initial investment in a pilot program with a set of institutions. “Small wins demonstrate the value of credential transparency to education and workforce leaders,” a state leader explained.

State Example

The **Pennsylvania** State System of Higher Education leveraged state workforce funding and federal pandemic relief funds to develop a credential registry for programs at the system’s two and four-year institutions. All credentials from state-owned institutions will be included initially, which will help to demonstrate the value of credential transparency and support learners navigating various high-demand pathways.
Investments like these can improve education leaders’ understanding of their existing credential landscape, in-demand credentials and fields, and pathways for students. Equipped with this information, state policymakers are positioned to better target investments and meet the needs of education and workforce stakeholders.

**Considerations for State Leaders**

Over the course of the meeting, participants highlighted three priority areas — data, governance and funding — for state leaders to consider. The full list of considerations for each priority area is included below.

**Data**

- Conduct a landscape and gap analysis of existing state data systems.
- Establish common language and metrics for data analysis in policy.
- Incentivize or require data collection and sharing for both postsecondary institutions and training providers.
- Establish data sharing agreements through policy or memoranda of understanding between state agencies.
- Provide clear guidance on data sharing that complies with state and federal privacy laws.
- Include principles of user-centered design in updates to data systems to ensure that data is actionable for state leaders, learners, employers and other stakeholders.
- Increase institutional capacity to collect and report data.
- Increase access to the data through outreach, consistent messaging and other individual supports.

**Governance**

- Require an inclusive and diverse stakeholder engagement process.
- Link credential transparency to state priorities and incorporate into state education and workforce plans and goals.
- Include credential transparency in institutional authorization and provider approval processes.
- Develop a credential quality framework.
- Require or incentivize stackable credentials.
Funding

- Codify credential transparency into investments, pathways and procurement policies.
- Require credential transparency reporting for providers accessing state financial aid.
- Leverage supplemental funding for pilot programs that demonstrate the value of credential transparency.
- Invest in student supports and services that increase access and completion.

Final Thoughts

State leaders are positioned to advance credential transparency as a key component of an aligned education and workforce development strategy. High-quality data on credentials provides a clear picture of the existing credential landscape, helps to identify existing gaps in pathways from education to work and offers guidance to target investments. Although Thinkers Meeting participants emphasized the importance of investing in the systems that enable credential transparency, they reiterated that high-quality data by itself does not increase access to high-quality pathways; they emphasized the importance of supports and services designed to help students along credential pathways and into the workforce. Credential transparency helps to inform state initiatives that prioritize access to high-quality credentials that lead to positive workforce outcomes.

Thinkers Meeting Attendees

- Katherine Ash, Second Mountain Strategies.
- Kate Akers, Pennsylvania’s State System of Higher Education.
- Shalin Jyotishi, New America.
- Patrick Lane, Western Interstate Commission for Higher Education.
- Jeannine LaPrad, National Skills Coalition.
- Robert McGough, Arkansas Department of Information Systems.
- Angela Perry, Data Quality Campaign.
- Lee Wheeler-Berliner, Colorado Workforce Development Council.
- Tiffani Williams, Federal Reserve Bank of Atlanta.
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