

CHARTING A COURSE TO QUALITY

**A NAVIGATOR'S
HANDBOOK
TO A ROBUST
NON-DEGREE
CREDENTIAL DATA
ECOSYSTEM**

NAVIGATING THIS HANDBOOK: HOW TO USE THIS PUBLICATION

This publication charts a course that state policymakers – specifically governors, state agency leaders, and legislators – and advocates can use to achieve a robust non-degree credential data ecosystem. It provides state policymakers with:

- A description of a robust non-degree credential data ecosystem and its elements.
- Specific actions that state policymakers can take to develop the elements of a robust data ecosystem with real-world state examples.
- Considerations to inform their journey toward a robust data ecosystem.

For state agency leaders and staff who are engaged in the essential technical work of developing a data ecosystem, the appendices in this publication include:

- An assessment tool that states can use to determine which elements of a data ecosystem they have and which ones they still need.
- A list of additional resources that may be useful for the technical aspects of developing a robust data ecosystem.





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GLOSSARY

NON-DEGREE CREDENTIAL DATA ECOSYSTEM:

The interacting set of data actors, infrastructure, systems, policies, and practices that come together to provide holistic information on the quality of non-degree credentials and whether they are leading to positive and equitable outcomes for people who earn them. *Note:* for simplicity, this paper will use “data ecosystem” interchangeably with “non-degree credential data ecosystem.”

ELIGIBLE TRAINING PROVIDER

LISTS: A list of training providers and their programs that have met the federal and state requirements for serving people using a Workforce Innovation and Opportunity Act Title I Individual Training Account voucher.

OUTCOME REPORTS AND

DASHBOARDS: Dashboards that use common metrics to report education and employment outcomes across publicly funded education and training programs.

OCCUPATIONAL SUPPLY AND

DEMAND REPORTS: Reports that compare the number of newly trained workers from education and training programs with employer demand as measured by the number of job openings. Comparisons are broken down by level of education and occupational field.

THIRD PARTY PROVIDER:

Providers of education and training and/or issuers of non-degree credentials that are not institutions of higher education, such as professional associations, licensing bodies, and private training providers such as proprietary training schools, bootcamps, and corporate training entities (e.g., Microsoft or Google).¹

RACIAL EQUITY: A state that is achieved when race or immigration status is no longer correlated with one’s outcomes; when everyone has what they need to thrive. For example, achieving racial equity in workforce development means race or immigration status no longer determines the likelihood of a participant’s completion of a training program or their educational attainment.

INTERSECTIONAL EQUITY:

Equity based on the concept of intersectionality, or the complex, cumulative way in which the effects of multiple forms of discrimination (such as racism, sexism, and classism) combine, overlap, or intersect especially in the experiences of people or groups who have been marginalized.²

NON-DEGREE CREDENTIAL:

Non-degree credentials can vary in programmatic length, credits earned, and postsecondary provider. They are conferred after successful completion of one or more academic or training courses or an evaluation of skills.³ Non-degree credentials often validate that a certain set of competencies or skills have been adequately mastered by the credential holder.⁴

QUALITY NON-DEGREE

CREDENTIAL: A credential that 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.

CREDIT TRANSFER AND

ARTICULATION: The recognition of credit earned at one institution of higher education or other education and training provider by another, usually a community college credit to a four-year college or university; credit articulation is the application of that credit to satisfy specific subject matter requirements for particular degree or credential programs of study.

CREDIT FOR PRIOR LEARNING:

The evaluation by an education and training provider of prior learning outside a traditional educational environment that is used to grant college credit, certification, or advanced standing towards additional education and training.⁵

LABOR MARKET OUTCOMES:

Employment and earnings outcomes of people participating in the labor force, including, for example, rates of employment and unemployment, average and median wages, employment by occupational sector, and the presence of occupational segregation and wage gaps.

LONGITUDINAL DATA:

The collection of data on the same sample, usually of people, over a prolonged period at repeated intervals, to observe changes over time.

INTRODUCTION

Postsecondary education and training have become essential to economic mobility, and equitable access to postsecondary education and training is critical to building an inclusive economy. Over the past decade, non-degree credentials have transformed the postsecondary education and training landscape. There are currently hundreds of thousands of postsecondary non-degree credentials offered in the U.S., including certificates, industry-based certifications, apprenticeships, and occupational licenses.⁶

Non-degree credentials offer accessible, flexible, and more affordable programs – many of which focus on skills and competencies that align with industry needs. Non-degree credential programs can be developed or updated quickly – offering workers a quick way to upskill to meet changing labor market demands and learn emerging technologies. Non-degree credentials can also facilitate lifelong learning and empower career transitions. Part of building a truly inclusive economy is increasing the **number of** and **diversity of** working people earning these **quality** credentials in workforce education and training programs.

States have put significant public resources into helping their residents earn non-degree credentials to meet their state's growing needs for a diverse and skilled workforce as the economy changes. Good data and information on non-degree credentials are key to ensuring that public investments help working people, students, local businesses, and policymakers meet their workforce goals. These stakeholders need good information about how people are doing in the labor market after they get a non-degree credential so that they can make decisions about which programs to invest resources in. They also need good information on how programs work for people who face structural barriers to opportunity so that everyone has a fair chance to succeed.

All states have some ability to collect data and report on non-degree credentials. However, most do not have the robust data ecosystem they need to fully maximize the benefits of high-quality non-degree credentials and protect against those that are low-quality.

State policymakers and advocates can use this publication to chart a course to a robust non-degree credential data ecosystem - one that can measure and provide information on the quality of non-degree credentials and whether they are leading to positive and equitable outcomes for people.

An **inclusive economy** is one where workers and businesses who are most impacted by economic shifts, as well as workers who face structural barriers of discrimination or lack of opportunity, are empowered to equitably participate in – and benefit from – a growing economy.

BEFORE EMBARKING: THE NEED FOR GOOD DATA AND INFORMATION ON NON-DEGREE CREDENTIALS

People are turning to non-degree credentials in the face of economic change

As industry practices and technology rapidly change, so do jobs and the skills they require. In this context, more adults are looking to quickly learn new skills or upgrade their existing skills so they can advance their careers and get ahead economically.

Non-degree credential programs offer a way to do that, especially for those balancing upskilling with the responsibilities of a job and family. In addition to being occupation-specific, non-degree credentials tend to be more affordable and take less time to complete than a degree. That's why it's no surprise that nearly as many working-age adults have completed a non-degree credential program (40%) as have completed a college degree (46%) according to a 2020 Strada-Gallup Education Survey.⁷

Quality assurance is key to determining which non-degree credentials provide value to people and the public

The proliferation of non-degree credentials happened at the same time that the majority of states set postsecondary attainment goals to meet their growing need for a diverse and skilled workforce. These goals are aimed at increasing the share of adults with a degree or credential and at closing racial equity gaps in postsecondary credential attainment.

In setting these goals, many states also invested public resources in programs to expand access to non-degree credentials. For example, according to a 2023 analysis by HCM Strategists, states are investing nearly \$4 billion a year in short-term workforce credentials, including in financial aid.

TYPES OF NON-DEGREE CREDENTIALS AND WHERE THEY ARE EARNED

CERTIFICATES, which are awarded by an educational institution based on completion of all requirements for a program of study, including coursework and tests. They are not time limited and do not need to be renewed;⁸

INDUSTRY CERTIFICATIONS, which are awarded by a certification body (not a school or government agency) based on an individual demonstrating, through an examination process, that they have acquired the designated knowledge, skills, and abilities to perform a specific occupation or skill. They are time-limited and may be renewed through a re-certification process;⁹

APPRENTICESHIP CERTIFICATES, which are earned through work-based learning and postsecondary earn-and-learn models. They are applicable to industry trades and professions. Registered apprenticeship certificates meet defined national standards;¹⁰

OCCUPATIONAL LICENSES, which permit the holder to practice in a specified field. An occupational license is awarded by a government licensing agency based on pre-determined criteria. The criteria may include some combination of degree attainment, certifications, certificates, assessment, apprenticeship programs, or work experience. Licenses are time-limited and must be renewed periodically;¹¹ and

BADGES AND MICRO-CREDENTIALS, which are an emerging category of credentials that validate the mastery of a skill or competency. They are offered through shorter-term learning programs, are linked to in-demand skills, and can often be aggregated or stacked with similar badges or micro credentials.¹²

To meet their goals and ensure a return on significant public investments, states must define which non-degree credentials are high-quality.

States must also determine how their investments in non-degree credential programs are leading to positive and equitable outcomes for people, particularly those who face structural barriers to opportunity and are overrepresented among non-degree credential holders.

For example, Black, Indigenous, and Latinx working-age adults are more likely than white and Asian working-age adults to have a non-degree credential as their highest level of postsecondary experience, and women of color are overrepresented among non-degree credential holders.¹³ If state policymakers want to meet their growing needs for a diverse and skilled workforce, they must ensure that everyone pursuing non-degree credentials has what they need to thrive economically.

Non-degree credentials can offer workers a pathway to better jobs and further postsecondary education and training. Research shows that non-degree credentials can lead to important employment and earnings gains, particularly for adults who have no other postsecondary experience.¹⁴

While many non-degree credentials lead to better jobs, higher wages, and career pathway opportunities, others have little economic benefit. The consequences of such credentials can be significant and multifaceted for workers, businesses, and the economy. Furthermore, the negative consequences are amplified for people of color and women – further entrenching economic inequities they already face. That is why it's of critical importance to identify quality programs – so working people do not waste their time and money on credentials that have little return on investment, don't lead to a good job, and don't help them achieve their career aspirations.

Transparent evaluation and reporting of the quality of non-degree credentials is also important for businesses, policymakers, and education and training providers. While these stakeholders have distinct reasons for wanting to understand the value of non-degree credentials, they all share a desire to make sure these credentials lead to good jobs and develop the competencies that businesses need.

For the past five years, National Skills Coalition (NSC) has worked with several states to define, measure, and track what makes a credential high quality.¹⁵ NSC and our state partners have determined that **quality** non-degree credentials should provide:

- **Substantial job opportunities**

People with the credential should have access to a significant number of job opportunities – more opportunities than they had without the credential.

- **Clearly defined competencies**

People should leave the education and training program equipped with competencies that align with the skills required for available job opportunities.

- **Improved employment and earnings outcomes**

People should experience better employment and earnings outcomes after obtaining the credential. Additional job quality indicators, such as health and retirement benefits, family and sick leave, and dependable hours, also matter.

- **Stackability**

People who have earned the credential should be enabled to pursue further education or training through career pathway programs, credit articulation and transfer agreements, and credit for prior learning.

- **Portability**

People should have more career options and greater mobility in the job market because the credential is recognized by a range of employers.

These quality criteria reflect what people most want from non-degree credentials. For working people and students, they help ensure that non-degree credentials lead to job opportunities with better pay and that time spent in training counts toward future education and career growth. For businesses, these criteria help ensure that credentials are validated by industry leaders and serve as trusted indicators of workers' skills and competencies.

Good data and information are essential to determining which non-degree credentials are high quality and advance equity

Working people and students, education and training programs, businesses, and public policymakers are all investing considerable time and resources in non-degree credential programs. They need to have transparent information on the quality of those credentials to know which ones will help them meet their goals.¹⁶

- **Working people and students** need to know which training programs and credentials will help them succeed in growing industries, how much they cost, and what kind of economic outcomes they can anticipate when they make a choice to invest time and resources on education, training, and pursuing an occupation.
- **Education and training programs** need to know which credentials they should offer to create a strong return on investment for people in their programs and how they can design their programs to advance racial equity.
- **Businesses** need to know that credentials validate a set of specific skills and competencies that they are looking for as they develop, hire, upskill, and promote people.
- **Policymakers** need to know which credentials improve economic mobility for working people and students, advance racial equity, and help businesses grow so that public investments directly support a stronger and more inclusive economy.

This information can only be provided if states have good, privacy-protected data on how working people and students are accessing credential programs and what their outcomes are when it comes to employment, wages, job quality, career growth, and further education.

Good data and information are also essential for ensuring that non-degree credentials advance racial and intersectional equity. Inequities in skills training programs can only be eliminated if high-quality information on program participation and outcomes is available to people, practitioners, and policymakers, so that they can assess and rectify equity gaps.¹⁷

To assess equity and address gaps, privacy-protected data on program access and outcomes should be disaggregated by race and ethnicity, gender, English language proficiency, income, and geography. For example, if state policymakers only look at average wages for all non-degree credential holders, they will miss important insights about specific programs that, for instance, have above-average wages outcomes for Black workers or those that have low wage outcomes for women.

Policymakers can use disaggregated data to actively advance racial and intersectional equity by:

- Ensuring that people of color and women have access to valuable credentials in industries where they are under-represented.
- Protecting against steering people of color and women into low-quality credential programs and occupations.
- Measuring program access and outcomes to maintain progress towards identifying and closing equity gaps.
- Designing programs and policies to address structural barriers that people of color and others face because of racism and additional forces of inequity.

Data Disaggregation Matters to Equity

Using disaggregated data is a critical step to identify and address gaps caused by structural racism and other longstanding race, gender, and class inequities that have shaped labor market policies and contributed to inequitable outcomes for workers – especially workers of color, women, and immigrants. Policymakers can use disaggregated data to address structural barriers to opportunity that different groups face and ensure that non-degree credential programs promote equity. While these are not the only categories by which states should disaggregate their data, they represent important characteristics that can reveal the existence of structural inequities.

RACE AND ETHNICITY

Racial and ethnic inequities in educational attainment, employment, and wages are the result of intentional historical and current policies and practices that have systemically limited opportunities for Black, Latinx, and Indigenous people as well as for many immigrants. We know that increasing the racial diversity of the workforce is linked to better outcomes for both individual businesses and the economy overall. And racial workforce diversity is one of the most important predictors of sales revenue, customer numbers, and profitability.¹⁸ Expanding skills training access for people of color and supporting their advancement along career pathways are necessary steps to achieving these positive outcomes.

GENDER

Gender disparities in employment and earnings continue to persist, especially for women of color and women born in other countries, who are overrepresented in low-wage jobs compared with white women. In addition to minimizing occupational segregation, successful skills training programs should provide other supports, like dependent care, to assist women in their career advancement.

INCOME

Black and Latinx workers are disproportionately represented in jobs that pay lower earnings, which translates into the accumulation of less personal and household wealth over time.¹⁹ While racial wealth disparities include both historical and contemporary factors and extend beyond differences in educational attainment, Black and Latinx students face the highest average unmet need in college expenses.²⁰ Huge racial wealth gaps mean that families of color are less able to financially invest in their children's postsecondary education, leaving college out of reach for many without taking out student loans.

GEOGRAPHY

Geography can impact people's access to education and job opportunities.²¹ In some cases, there are actual physical barriers between communities of color and communities in rural areas and job centers. Smarter workforce development policies can address some of these barriers (e.g., by locating training programs within target communities); however, inclusive economic development is needed to ensure that people of color and rural residents not only have access to quality job opportunities across their region, but also access to family-supporting job opportunities within their own communities.



INFORMATION ON CREDENTIAL QUALITY CAN ALSO SUPPORT AND HELP SCALE SKILLS-BASED HIRING AND ADVANCEMENT

Several major companies and more than a dozen states have shifted their recruitment strategies to skills-based hiring – an approach that prioritizes applicants’ skills, competencies, and experience over four-year degree requirements. Skills-based hiring has the potential to open opportunities to a broader, more diverse range of candidates. For skills-based hiring to work well, employers need a system for validating skills and competencies. That’s where information on the quality of non-degree credentials comes in. With good information, employers can tell which credentials certify that people have a specific set of skills and competencies aligned with an occupation’s requirements. With this information, employers can partner with training programs that offer people high-quality credentials and effectively prepare people for jobs.

States Have Further to Go

All states have some ability to collect data and provide information on non-degree credentials. However, most do not have the robust data ecosystems required to inform policy and program design so that they fully maximize the benefits of high-quality non-degree credentials and protect against those that are low-quality. Moreover, there is great variation among states when it comes to which elements of a robust data ecosystem they have and do not have.

Common challenges tied to non-degree credential data experienced by states are listed below:

- Many states do not collect comprehensive data on non-degree programs and credentials, especially those connected to noncredit programs at institutions of higher education and those offered by third-party providers, such as professional associations, licensing bodies, and private training providers like proprietary training schools, bootcamps, and corporate training entities.
- Gaps in data infrastructure can make it hard for states to compile, analyze, and report comprehensively on non-degree credential attainment and related outcomes. For example, not all states have data systems that can talk to one another, appropriate data sharing agreements, standardized data definitions, and data sharing across state lines.
- Public reporting on non-degree credential outcomes varies widely. States that invest in programs to give more people access to non-degree credential training (such as financial aid programs) often have required annual reports on those investments – though this is not always the case. Many states use online dashboards to provide public information about training and education pathways, programs, and outcomes, though these dashboards often provide limited information related to non-degree credentials.

THE DESTINATION: A ROBUST STATE NON-DEGREE CREDENTIAL DATA ECOSYSTEM

A robust non-degree credential data ecosystem can be used to measure and provide information on the quality of non-degree credentials and whether they are leading to positive and equitable outcomes for people – particularly Black, Indigenous, and Latinx people and women of color who are overrepresented among non-degree credential holders. It comprises a set of elements that work together to provide working people and students, education and training providers, policymakers, and employers with key information for decision making related to quality, equity, and outcomes.²² Importantly, policymakers and education and training providers can use this information to improve programs and hold them accountable for achieving positive and equitable outcomes.

Appendix A provides an assessment tool that states can use to determine which of these elements they already have and which ones they need to develop.

It's of critical importance to identify quality programs so working people do not waste their time and money on credentials that have little return on investment, don't lead to a good job, and don't help them achieve their career aspirations.

ELEMENTS:

A quality framework for non-degree credentials.

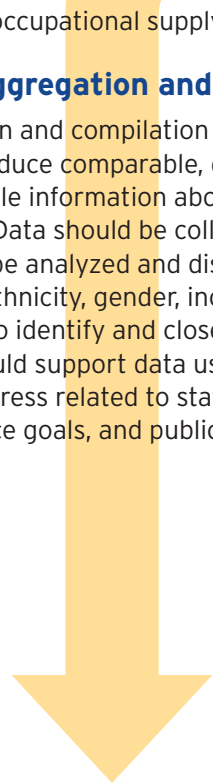
Specific measurable criteria with associated indicators that define a high-quality credential, metrics to assess the equity of outcomes tied to that credential, and a process for regularly conducting quality reviews.

Data on non-degree credentials, programs, and providers.

Comprehensive information needed to report and make policy decisions based on the quality and equity of non-degree credentials, including information about the credentials themselves, the education and training programs and providers who offer them, the people who pursue them and their educational and labor market outcomes, and related occupational supply and demand.

Data disaggregation and analysis.

The collection and compilation of data that allows states to produce comparable, disaggregated, and actionable information about non-degree credentials. Data should be collected and compiled so they can be analyzed and disaggregated, such as by race, ethnicity, gender, income, age, and geography, to identify and close equity gaps. Data analysis should support data use, including efforts to track progress related to state postsecondary and workforce goals, and public reporting on outcomes.



Data infrastructure.

Infrastructure that supports the data ecosystem including electronic data systems that store data on non-degree credentials and/or speak to other data systems that store relevant data; longitudinal data systems that incorporate non-degree credential data; and staffing and data tools necessary to analyze data and implement quality frameworks.

Data governance policies.

Policies that establish strong data ethics and use principles, data privacy protections, data sharing agreements, collection and reporting requirements for agencies, and clear accountability roles and responsibilities for ensuring data quality and security.

Data use practices and public reporting.

Practices and tools that enable state policymakers, agency leaders, education and training providers, students and workers, businesses, and researchers to understand and make decisions based on the quality of non-degree credentials and the labor market outcomes associated with them. Such tools include public dashboards, regular reports to policymakers, and career navigation tools.



STATE EXAMPLES: LOUISIANA AND VIRGINIA'S STATE DATA DASHBOARDS INCLUDE NONCREDIT DATA, SUPPORT TRANSPARENCY, AND MEET THE NEEDS OF DIFFERENT AUDIENCES

LOUISIANA

In 2020, the Louisiana Community and Technical College System (LCTCS) integrated noncredit data into its main student information system. This integration simplifies data entry for students moving between noncredit and credit programs, creates a shared student data pool for recruitment and financial aid eligibility, and streamlines data for decision-making. It also supports the **M.J. Foster Promise Program**, which provides financial aid for both credit-bearing and noncredit short-term programs. The system tracks grant recipients' credential attainment and earnings, enabling detailed reporting on outcomes like credit for prior learning and program completion rates.

VIRGINIA

The State Council for Higher Education of Virginia (SCHEV) collects regular data for the Workforce Credentials Grant (WCG)/FastForward program, forming the basis for new datasets by the Virginia Office of Education Economics (VOEE). As part of the Virginia Skills Initiative (VSI), VOEE's Non-Credit Skills Dataset tracks skills from noncredit programs eligible for FastForward funding. Partnering with Lightcast, skills are tagged based on credential documentation, course descriptions, and instructor surveys. This dataset, along with others from the VSI, will be available through public dashboards to provide insights into skills and career pathways for Virginia students and workers.

PLOTTING THE COURSE

WAYPOINTS FOR STATE ACTION

State policymakers – specifically governors, state agency cabinet officials, and legislators—can take specific actions to develop each element of a robust state non-degree credential data ecosystem. This section provides guidance on this course of action.

Depending on where they sit in state government, state policymakers can use legislation, executive orders, state budgets, and official agency policies or interagency memoranda of understanding to codify and direct resources toward the creation of a data ecosystem. Legislation is often an ideal policy tool, as it can help ensure that progress continues as elected officials, gubernatorial administrations, and agency staff change.

Legislation can also signal the importance of a credential data ecosystem to state agencies and other stakeholders. In the absence of statewide legislation, governors and state agency leaders can adopt policies through executive orders and state education and workforce plans. State investments in data infrastructure will need to accompany any legislative or executive actions.

Efforts to establish a robust credential data ecosystem should focus on how data can be used to ensure that non-degree credentials improve economic mobility and equity. As described earlier, working people and students, education and training providers, businesses and policymakers all need transparent information on the quality of non-degree credentials. Developing a data ecosystem should consider these stakeholders' needs to ensure state data collection and analysis, infrastructure, governance, and reporting practices support them.



Adopt criteria for quality non-degree credentials.

States need to set criteria for what makes a credential high quality and a framework for using those criteria to assess credentials. Having quality criteria and a framework for implementing them is essential. They ensure that the system is measuring and providing information on what matters most: which non-degree credentials are high-quality, leading to positive and equitable education and workforce outcomes for people. Official quality criteria and related quality assurance frameworks can also help ensure that everyone is using shared language, definitions, and outcomes measures in data collection and analysis.

As a starting point, state policymakers can use NSC's consensus quality criteria, described earlier in this publication. In finalizing criteria, state policymakers should seek input from stakeholders who most want and need credential quality assurance: working people and students, education and training programs, local businesses, and state agencies.



Support state agencies to improve and expand data collection, disaggregation, and analytical practices.

States need the right data to measure the quality of non-degree credentials and whether they advance equity. State policymakers can direct relevant state agencies to take the following steps to improve and expand data collection and analytical practices:

- Identify data that must be collected across multiple programs, providers, and agencies. Data should measure and provide information on the quality of non-degree credentials, the educational and labor market outcomes associated with them, and their equity implications. For example, key data collected should include information on program enrollment and completion (including noncredit programs), credential attainment, credential-related competencies, demographics, and labor market outcomes.



STATE EXAMPLES: COLORADO AND MINNESOTA ARE USING QUALITY ASSURANCE FRAMEWORKS

COLORADO

The Colorado Workforce Development Council (CWDC) worked with the Colorado Department of Higher Education (CDHE), Colorado Community College System, Colorado Department of Education, and Colorado Succeeds to create a **quality assurance framework** for evaluating non-degree credentials. This effort started because there was no consistent way to define and share data about these credentials. In addition, it was necessitated by legislation. In 2022, Colorado passed **Opportunities for Credential Attainment** (SB22-192) which required the creation of stackable credential pathways, leading to jobs or further education. As part of the legislation, CDHE is required to evaluate the quality of non-degree credentials that lead to in-demand living wage jobs as identified in the **Colorado Talent Pipeline Report**. The state established a Stackable Credentials Taskforce to develop the Quality and In-Demand Non-Degree Credential Evaluation Framework, which launched in 2023. This framework measures four signals of credential quality: demand, evidence of skills, employment outcomes, and stackability.

MINNESOTA

Minnesota's P-20 Education Partnership Credentials of Value work group **developed a quality framework** for both degrees and non-degree credentials to ensure both sets of credentials are held to the same standards. The quality assurance rubric avoids duplicating existing processes (such as accreditation for institutions of higher education or the requirements associated with the **Eligible Training Provider List**) and adapts to both higher education and workforce systems. It sets distinct quality criteria for credentials, programs, and providers, such as demand, wage, and knowledge and competency requirements, with evidence tailored to each. Providers are assessed according to criteria that include, for example, accreditation status or approval by Minnesota's Office of Higher Education (or another third-party vetting authority) and whether they provide wraparound supports for student success. The state work group intends to develop specific thresholds for assessing elements outlined in the rubric, which will vary according to specific policy goals and applications.

- Inventory existing data across federally and state-funded quality non-degree credential programs and investments to identify which data the state already has and where there are gaps.
- Establish practices that support data analysis to determine the economic and equity outcomes of non-degree credentials and inform decision making, including matching or linking data from multiple sources across education, workforce, and human services systems and to Unemployment Insurance wage records.
- Collect qualitative information to shed light on the experiences of people pursuing non-degree credentials during and after credential attainment. Qualitative data is necessary to supplement and fill gaps in quantitative data and provide a fuller picture of people's experiences and outcomes that can inform decision making.

3 Invest in data infrastructure.

States need data infrastructure to build, operate, and use credential data ecosystems to their fullest capacity. State policymakers, especially those with decision-making authority in the state budget process, should invest state resources in the data tools and staffing necessary to build and sustain a robust credential data ecosystem, including:

- Electronic data management tools and systems that are capable of securely storing data and interfacing with other electronic data management systems so that data systems can be “interoperable,” e.g., able to talk with each other, across education and workforce systems, with third party credential providers and across state lines wherever possible. State longitudinal data systems should also be built to integrate data on the range of non-degree credentials, including those that are tied to noncredit education and training programs.
- Staff capacity and professional development to build data systems and analyze data in a way that produces actionable findings. Staff need the awareness, skills and practices required to analyze data in a way that centers equity, so that data and information are used to mitigate harm, disrupt structural racism, and equitably distribute opportunity and resources.²³
- The capacity of education and training program providers, such as community and technical colleges or WIOA training providers, to collect and report data to the state. Providers need access to data on the employment and wage outcomes for the people they serve, especially data disaggregated by race and ethnicity, to be able to fully assess what is working well or not at a local level and make better program design decisions.
- The ability to securely share data with agencies, education and training providers, and researchers to conduct descriptive and statistical analyses of enrollment, program completion, and outcomes of people who earn non-degree credentials, in accordance with governance policies described below.

Such data sharing is necessary to answer key research questions pertinent to understanding the outcomes and equity of non-degree programs and credentials, and how they contribute to overall state workforce and postsecondary education priorities.

4 Set policies to govern the collection, use, and sharing of data.

To have a robust credential data ecosystem, states must collect personally identifiable information about people pursuing credentials. In doing so, states must ensure that people know what personally identifiable information is being collected about them and how their data will be used. State policymakers must also adopt data governance policies that set out strong data ethics principles, data privacy protections, principles of use, and guidance for data sharing agreements between agencies.

While demographic data and personally identifiable information are essential to analyze the economic and equity outcomes of non-degree credentials, it is critical to set policies that govern how such data is collected, analyzed, shared and reported so that data is not collected or used in a way that causes harm, particularly to those who have been previously harmed by data.

Specifically, it is important for policymakers to recognize and remedy our nation’s history of educational tracking when governing the collection and use of demographic data for educational and workforce purposes. Educational tracking steered Black, Latinx, Indigenous and other people of color into vocational programs that did not connect to high-quality careers or further education, contributing to occupational segregation and racial income disparities.



Require and invest in public reporting of data that supports its use.

States must provide public information on the quality and equity of non-degree credentials so that working people and students, education and training programs, businesses, and public policymakers can use that information to make decisions. State policymakers should require and fund the following strategies to ensure that data are analyzed, and findings are reported in a responsible and transparent manner:

- **Data narratives.** States can weave qualitative and quantitative data together to share stories and information about learner experiences and outcomes with key stakeholders: legislators, agency leaders, prospective students, employers, education and training providers, private funders, and others. Data narratives play a crucial role in contextualizing findings and communicating their significance to tell the full “credentials to careers” story. By engaging with students, workers, employers, and other stakeholders, states can ensure these voices are central to policy development, humanize outcomes, identify structural barriers, and tell compelling stories about learner experiences and career trajectories.

- **Consumer-facing data tools.** Consumer-facing tools distill information about the quality of non-degree credentials, as well as their economic and equity outcomes, in a clear and accessible way for consumers: working people, students, and businesses. States can use a suite of easy-to-understand consumer-facing data tools, such as career navigation websites, training provider lists, outcome reports and dashboards, and



STATE EXAMPLE: NEW JERSEY IS USING DATA FOR ACCOUNTABILITY AND TO IMPROVE EQUITABLE OUTCOMES

The New Jersey Department of Labor and Workforce Development (NJDOL) has designed a statistical model within their **quality framework** for the Eligible Training Provider List (ETPL) that estimates the difference between predicted program outcomes, adjusted for the specific makeup of the program/provider combination, and the program’s actual outcomes. Programs in the bottom tenth percentile must develop and follow a two-year corrective action plan to improve outcomes. If they are unable to do so by at least ten percent, they are removed from the ETPL (but can reapply later). Since its implementation in July 2022, NJDOL has supported training providers with technical assistance to help providers comply with the new quality assurance data requirements, bi-monthly working groups, and feedback into the development of quality assurance resources and a toolkit that will benefit the broader training provider community.



STATE EXAMPLE: ARKANSAS IS INTEGRATING NONCREDIT DATA INTO ITS REGULAR DATA COLLECTION PRACTICES

Starting in September 2024, the Arkansas Division of Higher Education (ADHE) will begin to intentionally collect more robust noncredit data from Arkansas colleges and universities. Over the past two years, key stakeholders had been building a case for enhancing noncredit data collection by identifying the gaps in current data which were hampering the state's ability to understand its noncredit education and training system. The lack of comprehensive noncredit data made it difficult to understand which programs and students were eligible for a state grant program called the [Arkansas Workforce Challenge](#) (which provides up to \$800 for students in eligible programs in health care, IT, and manufacturing). Efforts to increase the scholarship amount were stalled due to the inability to fully describe award recipients pursuing noncredit programs. To address this, ADHE, ARData, Arkansas Community Colleges, and institutional leaders are collaborating to improve noncredit data collection statewide.

workforce supply and demand reports to provide the information that working people, students, and employers need to make informed decisions about non-degree credentials. States should take care to advertise the existence of these tools.

- **Public reports to policymakers on public investments in non-degree credential programs.** States are investing considerable resources in expanding access to non-degree credentials. To help ensure the accountability and equity of those programs, state policymakers can mandate public reports on the outcomes of programs that the state funds, including state financial aid programs, training programs on eligible training provider lists, and others. These reports are also useful to programs that provide non-degree credentials and advocates, all of whom want to know what is working and what is not. When mandating these reports, state policymakers should require that they include metrics associated with educational and economic outcomes disaggregated by race/ethnicity, gender, and other characteristics. Policymakers should also require such reports to utilize data analysis and narratives as described above so that data can be used to dismantle structural racism and other forces of inequity in non-degree credential programs.

COMPASS POINTS: CONSIDERATIONS FOR POLICYMAKERS, STATE AGENCIES, AND ADVOCATES ON THE JOURNEY

The creation of a robust credential data ecosystem is a journey, and each state will be in a different place along it, based on their policy landscape, existing data capacity, and unique context. Still, there are key considerations that policymakers, state agencies, and advocates should keep in mind on their journey.



Show how a robust non-degree credential data ecosystem can help assess progress toward existing statewide education and workforce goals.

All states set education and workforce goals, and many have created programs or initiatives to meet those goals. For example, some states have established financial aid programs for non-degree credentials to increase postsecondary attainment in the state. Champions for data ecosystems, whether they are elected officials, state agency staff, or advocates, can make the case for it with policy decision makers by showing why such a system is necessary for tracking progress toward postsecondary attainment goals or for assessing the impact of public investments in non-degree credential programs.



Secure early leadership of elected officials.

State legislators and governors can create a mandate for action and invest resources in developing a data ecosystem. They can also utilize their leadership publicly to facilitate ongoing collaboration across state agencies and stakeholders.



Build partnerships and engage stakeholders across agencies and organizations.

Data ecosystems are most effective when they are informed and used by a variety of stakeholders. Though stakeholders may differ from state to state, they will likely include representatives from the state's higher education and workforce agencies, community colleges, businesses, community and civil rights groups, and student and worker organizations. By engaging these stakeholders, states can ensure that credential quality and equity are at the center of the work and that those who utilize non-degree credentials have a voice in the process.



Focus on specific programs or "use cases" as a starting point.

For those at the start of this journey, building a data ecosystem for all non-degree credential programs in the state may be overwhelming. Stakeholders can focus on a particular policy application or "use case" to get started and build momentum. For example, stakeholders might start by determining how to build data elements required to measure the quality and equity of non-degree credentials that are funded by a particular state financial aid or grant program. These use cases can help focus energy and resources and provide a jumping-off point for expanding the non-degree credential data ecosystem to other programs.



Create a policy environment that supports data-informed policymaking and continuous improvement.

Policymakers, programs, and advocates must use data in decision-making to maximize the benefits of high-quality non-degree credentials, protect against those that are low-quality, and advance racial and intersectional equity. Using data in this way is easier in a policy environment that celebrates data and

information as a critical tool for strengthening impact. State policymakers and advocates can support the following strategies to ensure that data is used to improve policies and programs:

- **Develop state strategic plans and research agendas that prioritize data-informed goals and strategies related to non-degree credential quality and equity.** States are increasingly recognizing quality non-degree credentials as key to achieving state credential attainment goals, building talent pipelines for in-demand and growing occupations, and providing residents with a ladder to improved career and economic outcomes. States can set goals and strategies related to non-degree credential attainment and associated labor market outcomes to ensure that such credentials increase economic mobility and equity. Doing so will also help states to structure and prioritize the development of a data ecosystem.
- **Create accountability for non-degree programs, providers, and policies intended to expand equitable access to quality non-degree credentials.** Policymakers can establish accountability mechanisms by setting clear performance metrics, tracking progress toward goals, and providing resources and technical assistance to encourage continuous improvement. They can use this information to refine, replicate, and scale programs that are most effective.
- **Support research and evaluation that assesses the impact of policies intended to expand access to quality non-degree credentials.** Such research can shed light on which policies have strong outcomes for people, businesses, and the public and which need improvement. They can also answer key questions important to advancing state goals and priorities, meeting labor market demands, effectively serving residents, and reinforcing equity. State policymakers can support research and evaluation through providing state funding, seeking federal grants, and partnering with external researchers at academic institutions.



STATE EXAMPLES: TEXAS AND VIRGINIA ARE BUILDING NON-DEGREE CREDENTIAL DATA AND OUTCOMES INTO THEIR STRATEGIC PLANS

TEXAS

The Texas Higher Education Coordinating Board's (THECB) 2022-2030 strategic plan, *Building a Talent Strong Texas*, outlines steps the state should take to meet the state's attainment goal. One step is incentivizing the attainment of credentials of value—including non-degree credentials. *Building a Talent Strong Texas* established a goal of making Texas the first state in the country to tie the state attainment goal to the wage premiums students earn as a result of earning their credential, including degrees, certificates, and short-term non-degree credentials. The passage of **HB 8** in 2023 supports this goal by leading THECB in partnership with other agencies to define valuable non-degree credentials and high-demand occupations, and gathering the data needed to identify these credentials for the purposes of the new performance-based funding formula.

VIRGINIA

The Virginia Community College System (VCCS) is leveraging data from its Workforce Credential Grant to understand patterns related to students' economic mobility. This work is aligned with VCCS's strategic goal of increasing the share of graduates who achieve upward mobility to fifty percent by 2027. By matching UI records to student outcomes data for grant recipients, VCCS can see trends and equity gaps tied to race, ethnicity, and gender, including whether students are securing good jobs. VCCS works closely with industry partners and employs career counselors to identify skills needed for open jobs and the wages associated with credentials offered, in order to ensure students' expectations are realistic and to inform the programs so they are geared towards high-wage opportunities. They pay particular attention to how institutions can help students of color make decisions about credentials and employment, so that they are pursuing pathways that lead to high-paying careers.²⁴

APPENDIX A. RUBRIC FOR ASSESSING STATE PROGRESS AND CAPACITY TO MEASURE AND REPORT ON QUALITY NON-DEGREE LEARNING, CREDENTIALS, AND CAREER PATHWAYS

Overview

Data—including data policies, systems and infrastructure, data capacities and practices, reporting mechanisms and requirements, in addition to the actual data collected—are essential to determining the quality of non-degree credentials (NDCs) and to evaluating equity in the employment and earnings outcomes of people who attain them. States' development of quality assurance frameworks and policies has accelerated in recent years, as has their investment in financial aid for people pursuing NDCs and other funding to support NDC programs and pathways.²⁵ Ensuring states have the right data, capacities, and reporting tools and practices to measure and report on NDC quality and the equity of NDC holder outcomes is critical for both policymakers and consumers to make informed decisions related to NDCs.

While no state will have all the capabilities, infrastructure, and reporting practices described in this rubric, they represent what states and systems should be striving for to build a high-quality NDC ecosystem that results in strong outcomes for learners, employers, and the state.

This rubric is intended to provide a benchmark for assessing state capacity to measure, analyze, and report on NDC quality and the extent to which NDC outcomes are equitable for the people who earn them. While no state will have all the capabilities, infrastructure, and reporting practices described in this rubric, they represent what states and systems should be striving for to build a high-quality NDC ecosystem that results in strong outcomes for learners, employers, and the state.

Defining Quality Non-Degree Credentials

For this rubric's purposes, an NDC is defined as any postsecondary credential beyond a high school diploma (or its equivalent) but not an associate degree. They are conferred after successful completion of one or more credit-bearing or noncredit education or training courses or an evaluation of skills.²⁶ NDCs validate that a set of competencies or skills have been adequately mastered by the credential holder.²⁷ NDCs include certificates, industry certifications, apprenticeship certificates, occupational licenses, badges, and micro-credentials. NSC defines a high-quality NDC as one that provides people with the means to equitably achieve their employment and educational goals, as assessed by valid, reliable, and transparent evidence that the credential satisfies the criteria that constitute quality (described below).²⁸

When determining what and how to measure and report on NDCs, states should consider the forms of equity at play. Centering equity in how data are collected and used is essential to ensure that workers who were previously held back by structural barriers of discrimination and lack of opportunity can participate in an inclusive economy. Racial equity—defined by NSC as when race or immigration status is no longer correlated with one's outcomes;

RESOURCES FOR EQUITY-CENTERED DATA POLICIES AND PRACTICES

Centering equity in how data are collected and used is essential to ensure that workers who were previously held back by structural barriers of discrimination and lack of opportunity can participate in an inclusive economy. For more information on centering equity in data collection, analysis, and usage, see the following resources:

- [Credential Engine's Equity Advisory Council Report and Recommendations](#)
- [Education-to-Workforce Indicator Framework Data Equity Principles](#)
- [A Toolkit for Centering Racial Equity Throughout Data Integration](#)

when everyone has what they need to thrive, no matter where they live—should be centered first and foremost, in addition to other forms of equity based on gender, age, disability status, LGBTQIA+ status, socioeconomic status, justice-impacted status, and the intersection of two or more identities that can lead to additional marginalization, such as gender and race.²⁹

States must develop the data collection, analysis, and reporting capacities that enable them to assess multiple forms of equity relative to:

- People's access to, attainment of, and outcomes associated with quality NDCs, including the returns on people's investments in pursuing them;
- The extent to which investments in quality NDC programs, providers, and pathways, financial aid, and supports are accessible to and taken up by people and offered by institutions in a diversity of geographic areas; and
- The availability and accessibility of information regarding NDC quality, equity, outcomes, and how to access quality pathways and programs.

Key Data Practices and Capacities

Certain data collection, analysis, and reporting capacities and practices are essential for robust measurement of and transparency around the quality of NDCs and the outcomes of those who earn them. The practices listed below should be considered from the perspective of credentials, programs, and providers, and looked at across systems, provider types, and credit-bearing status, knowing that these categories and variables may exist in separate data systems (or there may be significant data gaps related to which data are collected, housed, and reported on by states based on these factors).

- **Data collection** on credit- and noncredit programs that lead to NDCs, and the students that pursue them, that allows states to produce comparable, disaggregated, and actionable information about NDCs awarded throughout the postsecondary system (including by public and private institutions and community-based non-profit providers).
- **Data disaggregation** to describe the characteristics of learners pursuing and earning NDCs (including race, ethnicity, gender, age, and others), to understand receipt and outcomes for recipients of state investments/programs related to NDCs (including financial aid), and to reveal when gaps exist in NDC earner employment and wage outcomes.
- **Matching** to Unemployment Insurance (UI) wage records, state longitudinal data systems, and national/regional data sharing partnerships, such as the Census Bureau's Postsecondary Employment Outcomes project and the U.S. Department of Labor's State Wage Interchange System (SWIS), as well as other available labor and workforce data.
- **Assessment and analysis** of educational outcomes, including persistence, credit accumulation, program completion, credential attainment, transfer, and successful stacking of NDCs to additional credentials along a defined career pathway.

- **Mapping and monitoring** the existence of career pathways and credential stackability along those pathways.
- **Equity analyses** related to access/enrollment, program completion, credential attainment, and educational and labor market outcomes (including the extent to which occupational segregation is being disrupted/reinforced), by funding source/state investment, and in the design of credentials, programs, and career pathways.
- **Return on investment analyses** to determine economic returns to students for pursuing and earning NDCs.
- **Public reporting** of disaggregated NDC outcomes for consumer and policymaker audiences through dashboards, reports, resources, and tools that are easy to locate and use.
- **Meaningful and consistent usage** of data for decision making, policy design and implementation, and accountability related to the identification of quality and equity gaps and other trends related to NDCs (access, outcomes, and investments).

Key Data

The data described below represent the key variables needed to conduct a comprehensive analysis of NDC quality and related elements, such as accessibility and affordability; student outcomes tied to NDC attainment, including whether they are equitable; state, federal, and private investments in NDCs and related programs and providers; and alignment with state estimates of occupational supply and demand.

- **NDC enrollment and attainment**, providing the number and share of students who 1) pursued and persisted in both credit-bearing and noncredit programs associated with NDCs, 2) completed credit-bearing and noncredit NDC programs, and 3) attained a particular credential type, including exam and licensure passage rates.
- **NDC related competencies**, sharing transparent evidence of the knowledge and skills obtained by credential holders, including some indication of how the credentials align with industry or sector standards and are valued by employers.
- **NDC provider and program information**, across the postsecondary and workforce systems, including the Eligible Training Provider List providers, national/state certification and licensing entities, apprenticeship programs, and across provider types (e.g., nonprofit/for-profit status and public/private status).
- **NDC program information**, across provider types, systems, and industry sectors; and including information on program length and level of investment.
- **Demographic data, including a unique identifier** for students who pursue and earn NDCs to allow for matching/tracking across data systems, that can be disaggregated by race, ethnicity, gender, age, income status, and other characteristics, including crosstabs and with comparable data for students who enroll in both credit-bearing and noncredit courses/programs.
- **Access and equity features related to NDC programs and providers**, such as the provision of holistic supports for NDC learners, availability of remote or hybrid learning options, and program design (e.g., whether programs are accessible to people for whom English is a second language or who are neuro-diverse).
- **Financial aid and public benefits eligibility information** for students pursuing NDCs.
- **Financial aid and public benefits receipt** for students pursuing NDCs that can be linked to postsecondary data and wage records.
- **Costs associated with NDC attainment**, including average/median program tuition, fees, and the costs of required materials and supplies, credential attainment costs (e.g., licensing and certification fees, exam fees), and standardized calculation of the total cost of attendance for students who pursue NDCs.
- **Debt associated with NDC pursuit/attainment**, including share of students who pursue NDCs who take on debt and average/median amount of total federal and private loans taken out to finance NDC programs and related nontuition costs.

- **Labor market outcomes** average/median wages, pre- (within six months of enrollment), during, and post-program wages (such as six months, one year, three years, and up to ten years, following credential attainment), employment rates (ideally with information on alignment between occupation and credential), and longitudinal outcomes related to wage growth and wealth building (and time-based information that enable these analyses, such as program entry and exit/completion dates).
- **Educational outcomes** additional credentials earned, credit to noncredit transfers/alignment/mobility, transfer to four-year institutions, and progress of students along career pathways via stackable credentials.
- **Alignment with state occupation demand and supply estimates** specific credentials mapped to occupations categorized as in-demand, growing, high-wage/quality, critical, or other categories, including alignment to local and regional demand assessments.

Key Data Policies, Systems, and Infrastructure

Robust data policies, systems and infrastructure are necessary for putting the right data and data practices into action. States need to invest resources into building these systems and the staff capacity and professional development required to operate them to their fullest capacity. Investments in building partnerships within and across states and agencies are also important for creating the cross-state, system, and agency data sharing that enables full understanding of NDC quality and student outcomes.

- **Electronic data systems/student information systems** that include noncredit data, and/or can speak to systems housing noncredit data, and which are used for the administration and collection of data related to state investments in NDCs, including financial aid receipt and participation in other state-funded programs, including workforce programs that support NDC participation (e.g., WIOA, Perkins CTE) and state registered apprenticeships.

- **Data governance and privacy policies** that prioritize safeguarding Personal Protected Information (PPI) and ensure there are appropriate privacy guardrails in place that align with state values and goals for data use; this includes data governance that creates transparent processes to guide how data is used and protected, as well as building capacity for responsible data use.
- **Data sharing agreements and policies** across secondary and postsecondary education, workforce, human services, and justice systems.
- **Matching capabilities** with UI wage records, in addition to the leveraging or creation of national/regional data sharing partnerships to understand outcomes for NDC holders across state lines.
- **State longitudinal data systems** that integrate data from across early, secondary, and postsecondary education, financial aid, workforce, human services, and justice systems.
- **Staffing, resources, and data tools** that provide the capacity for matching and conducting relevant analytics and analyses, including statistical and descriptive analyses, of NDC data, as well as the appropriate professional training for collecting, storing, analyzing, and using data with equity at the center.
- **Consumer reporting tools**, including public dashboards, credential registries, and eligible training provider lists, sharing aggregate and disaggregated data/crosstabs describing how different people fare with different credentials, jobs, and in different sectors, and alignment between credentials, programs, and in-demand occupations.
- **Mechanisms to share personal and personalized data** with students and workers, including individualized information such as digital records of competencies and skills earned, credentials attained, and employment history, and personalized data that can answer tailored questions to inform an individual's education, training, and career decision making.

Key Transparency and Reporting Requirements

NDC data, outcomes, and quality and equity assessments are most valuable if they are made transparent and accessible to and usable for students and workers, employers, educators, and policymakers. While these stakeholders have varied reasons for wanting to understand the quality and value of NDCs, they all share a desire to make sure these credentials lead to good jobs and help develop the competencies that businesses need. The reporting and transparency requirements and practices shared below encompass the actions states should take to make sure that key stakeholders can make data-informed decisions related to NDC programs, learning, and career pathways.

- **Mandated public and legislative reports related to NDC investments (state and federal)**, including state financial aid programs, eligible training provider list performance data, and other state policies/programs, as well as the full range of NDCs offered through the career and technical education, postsecondary, workforce, and apprenticeship systems.
- **Measuring and reporting on the following at the credential, program, and provider levels:**
 - Learning outcomes, including skills and competencies, in a way that can be easily and transparently mapped to employer needs/job descriptions.
 - Education and labor market outcomes, for example, reporting on alignment of programs and credentials with in-demand occupations that pay family-sustaining wages and reporting on the employment and earnings outcomes for students/participants who complete specific programs and earn credentials.
 - Career pathway opportunities and progression, especially related to stackability (e.g., transfer and credit for prior learning) and for credentials not issued by traditional higher education institutions.
- **Evidence tied to quality metrics**, including:
 - Evidence of substantial job opportunities
 - Credentials must be validated by employers
 - Evidence of the competencies mastered by credential holders
 - Evidence of post-attainment employment & earnings outcomes
 - Stackable to additional education & training
 - Portable across employers in different areas/states
- **Measuring and reporting on evidence tied to racial and ethnic groups, gender, age, and other characteristics**, including:
 - Enrollment, completion, and credential attainment, specifically for credentials/programs designated as high quality
 - Access to and receipt of state investments in NDCs, such as financial aid programs
 - NDC holder outcomes (education and economic) and returns on investment in NDCs
- **Publication of key data and findings via consumer-facing tools**, ideally via the use of linked, open, interoperable data formats such as the Credential Transparency Description Language (CTDL), to allow students/workers, education providers, employers and other stakeholders to understand and make informed decisions based on the outcomes and trends associated with particular NDCs, including, secure digital student records such as learning and employment records.
- **Development and implementation of strategic outreach and communication** designed to get consumer-facing tools and the key information they provide on credential quality and student outcomes into the hands of students and workers, school counselors, community-based service providers, and other key stakeholders to facilitate data-informed decision making about career pathways and education and training opportunities.
- **Use of qualitative and quantitative data together to create narratives** that share learner experiences and outcomes with funders, legislators, students, and colleges to help them understand the value of NDCs for achieving people's education and career goals.

APPENDIX B. ADDITIONAL RESOURCES TO GUIDE POLICY CHANGE AND DEVELOPMENT FOR STATE AND FEDERAL POLICYMAKERS

Several national postsecondary organizations have focused on developing a set of tools and resources to support state efforts to advance transparency and reporting for quality non-degree credentials (QNDCs). Much of this work centers on identifying key data infrastructure and practices for increasing the transparent reporting of education and training program outcomes at the federal, state, and institutional levels. For example:

- **Competency Based Education Network (C-BEN)** has supported the work of the Alabama Talent Triad, an initiative out of the Alabama Governor's Office to create a skills-based talent marketplace that connects job seekers, employers, and education providers. Along with a state talent playbook, in partnership with the Aspen Institute, C-BEN has also highlighted lessons from Alabama's use of learning and employment records which can support other states looking to build or expand these marketplace systems.
- **Alabama Talent Playbook**
- **Employer Use of Learning and Employment Records: Early Lessons from Alabama Talent Triad**
- **Credential Engine** has outlined a roadmap and action guide to build awareness, understanding, and demand for how policies can integrate credential transparency into education and workforce development state strategies. Additionally, Credential Engine worked with twelve national organizations to publish several policy briefs designed for states to take action to support, integrate, and leverage credential transparency efforts. An Equity Advisory Council also published a report identifying data points that show educational programs are designed for equity and principles for supporting students in navigating these pathways.
- **Making Sense of Credentials: A State Roadmap and Action Guide for Transparency**
- **The Role of States in Credential Transparency**
- **Credential Transparency: An Essential Part of Attaining State Goals**
- **Credential Transparency and P-20W Data Systems: Aligning Education and Employment Information to Meet State Talent Goals**
- **Equity Advisory Council: Report and Recommendations**
- **Data Quality Campaign** advocates to ensure that data work for everyone navigating their education and workforce journeys. This involves providing a national picture of state and local data efforts and supporting policies & practices that advance data transparency, reporting, and integration between education and workforce data. A few of the resources for state policymakers include:
 - **A Vision to Transform State Data Systems to Inform People's Pathways through Education and the Workforce**
 - **People Need Data to Navigate a Skills-Based Future**
 - **DQC Use Cases 2023 State Recommendations to support data access through improved statewide longitudinal data systems**
 - **The Art of the Possible: Data Governance Lessons Learned from Kentucky, Maryland, and Washington**
 - **What Are Statewide Longitudinal Data Systems? Fast Facts for State Policymakers**

- **Education Commission of the States** facilitates data transparency and reporting of NDCs by collecting, analyzing, and disseminating comprehensive information to policymakers and stakeholders. The following resources provide a landscape overview and policy recommendations for states looking to better foster alignment of NDCs with workforce need, emphasizing opportunities for increased credential transparency as well as a robust overview of statewide longitudinal data systems (SLDS) across all 50 states.
 - **Policy Levers to Advance Credential Transparency**
 - **50 State Comparison: Statewide Longitudinal Data Systems**
- **Education Design Lab** leads a groundbreaking effort that collects data directly from education providers and connects their data with national organizations, government agencies, and others to paint a picture of education and work outcomes for non-credit programs. More information about this initiative is captured here:
 - **Data Collaborative for a Skills-Based Economy**
- **Education Strategy Group (ESG)** works with states, systems, institutions, local leaders, and employers to identify high-value credentials and design strategies that increase the number of learners who complete them. ESG supports this work through initiatives such as the institutionally focused **Noncredit and Credit Alignment Lab**, the state focused **Noncredit Mobility Academy**, and **Racial Equity for Adult Credentials in Higher ed (REACH)**. These efforts are particularly important given the rapidly changing labor market during the post-pandemic economic recovery.
 - **A More Unified Community College: Strategies and Resources to Align Non-Credit and Credit Programs**
 - **Building Economically Mobile Pathways from Noncredit**
 - **Building Credential Currency: Resources to Drive Attainment across K-12, Higher Education, and Workforce Development**
- **Education Quality Outcomes Standards (EQOS)**, a partnership between Jobs for the Future and the Burning Glass Institute, is pioneering a framework and methodology to measure the quality and efficacy of NDCs to help people navigate the increasingly crowded and confusing education and training marketplace.
 - **The Importance of Understanding Non-Degree Credential Quality**
- **Harvard Project on Workforce** has conducted research on the landscape of NDCs to understand the types of programs, assess challenges of longitudinal data systems, and provide recommendations for policymakers. They have also analyzed the landscape of Eligible Training Provider programs across the U.S.
 - **The Path Forward for Non-Degree Credentials: Landscape Analysis, Challenges and Innovations**
 - **Navigating Public Job Training**
- **National Conference of State Legislatures**, supported through a Nondegree Credentials Working Group, is also looking at state policy actions and opportunities for advancing nondegree credentials. Published resources include a framework for state policy actions and a policy brief highlighting several examples of where states are approaching nondegree credentials.
 - **NCSL Nondegree Credential State Policy Framework**
 - **State Approaches to Nondegree Credentials**
- **National Governors Association** in partnership with the Data Quality Campaign is working with states in a new learning ecosystem to help Governors' offices and other state officials better understand their state longitudinal data systems and look at the current state of play when it comes to the use cases for learning and employment records (LERs).
 - **State Longitudinal Data Ecosystem**
 - **Learning and Employment Record Use Cases**

- **National Skills Coalition** has spent several years working with states to support robust quality, equity, and transparency for NDC investments and efforts. NSC collaborated with a set of twelve states to develop consensus quality criteria for NDCs that can be used to develop metrics for assessing credential quality, identifying equity gaps, and guiding state policy and investments. NSC has also looked at NDC credential attainment across all 50 states, published a state policy toolkit for NDC quality and transparency, and elevated emerging innovations in data work.
 - **The Non-Degree Credential Quality imperative**
 - **Measuring Non-Degree Credential Attainment**
 - **Creating an Impact with Credential Quality and Transparency: A State Policy Toolkit**
 - **Emerging Innovations in Data Transparency, Governance, and Quality**
- **Non-degree Credentials Research Network (NCRN)**, managed by researchers at the George Washington Institute of Public Policy and the Rutgers University Education and Employment Research Center, is a multi-disciplinary community of scholars, practitioners and policymakers that focuses on the role of certificates, certifications and other NDCs in the labor market. Their work has documented the research progress of NCRN members, lessons learned from the network, and the most pressing research questions that remain.
 - **New Directions for Non-Degree Credentialing Research: Report of the Non-Degree Credentials Research Network**
 - **What We Know About Non-Degree Credentials: A Literature Scan**
- **Rutgers Education and Employment Research Center (EERC)** delves into short-term workforce education and training offerings to better understand what they are, how data can be collected on them, and systems that can measure and promote their quality. Their research has identified existing and potential measures to advance quality at the institutional level, including credential design, competencies, market processes, and outcomes. Rutgers EERC has also compiled and documented opportunities for multistate longitudinal data exchange, the landscape of national organizations supporting NDC quality work, ongoing research around NDCs, and links between NDCs and occupational needs.
 - **Non-Degree Credential Quality: A Conceptual Framework to Guide Measurement**
 - **Documenting the Value of Non-Degree Credentials: The Potential Role of the Multistate Longitudinal Data Exchange**
 - **Building a System for Non-Degree Credential Quality: A Landscape Scan of National Influences on NDC Quality - Summary of Organizations**
 - **Review of Recent Research on Noncredit Education**
 - **A Primer on Noncredit and Non-degree Credentials and Their Link to Occupations**
- **U.S. Chamber of Commerce Foundation** with the T3 Innovation Network launched the JEDx initiative to develop a public-private approach for collecting and using standards-based jobs and employment data. This initiative builds on the Learning and Employment Record (LER) initiative, a collaborative effort that developed a resource hub and ecosystem map to build a community of practice and support organizations implementing LERs.
 - **Jobs and Employment Data Exchange (JEDx)**
 - **LER Resource Hub**
 - **LER Ecosystem Map**

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ABOUT NSC

The National Skills Coalition fights for inclusive, high-quality skills training so that people have access to a better life, and local businesses see sustained growth. We engage in analysis and technical assistance, organizing, advocacy, and communications to improve state and federal skills policies. Learn more at nationalskillscoalition.org and follow us [@skillscoalition](https://twitter.com/skillscoalition).



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