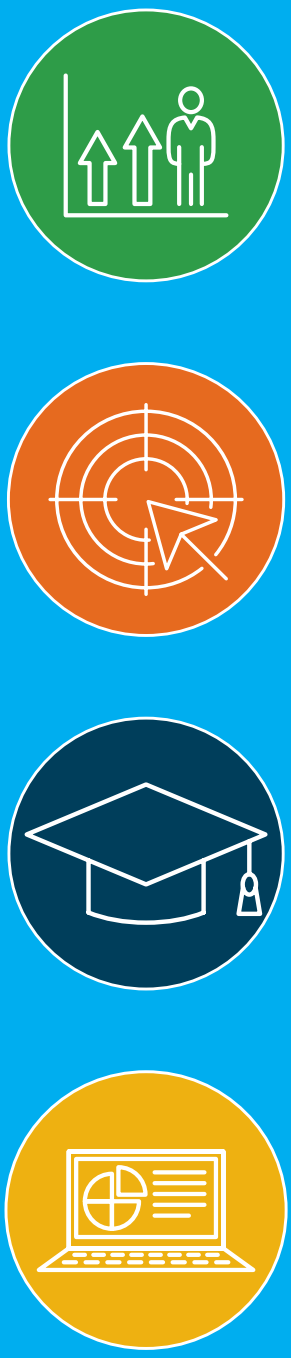
Building Credential Currency

Resources to Drive Attainment across K-12, Higher Education, and Workforce Development



ESG Education Strategy Group
ACHIEVING GREATER IMPACT

JUNE 2019

Table of Contents

To download customizable versions of the tools in this toolkit, visit http://edstrategy.org/resource/building-credential-currency/.

Introduction

Across the country, the pathway to economic security and self-sufficiency looks far different than it once did. Significant economic shifts—spurred both by rapid technological advancement and the downturn of the Great Recession—have fundamentally altered the reality of education and work. Postsecondary education is now a requirement to access good jobs, but there are many more pathways learners can take to get there, including those that culminate in non-degree credentials.

States and communities across the country have begun to recognize that non-degree credentials (in this case, industry-recognized credentials) have an important role to play in education systems seeking to be more responsive to the new economy. Yet there are thousands of these credentials available and identifying which are high-value and which are not is complex. With 26 states including industry-recognized credentials in their high school accountability systems and others contemplating whether such credentials should count toward their postsecondary attainment goals, the stakes have never been higher.[1] The choices states make about which non-degree credentials "count" will either encourage learners down a meaningful career path or unwittingly steer them to pursue lower-value credentials that do not lead to good jobs.

Education Strategy Group is pleased to share this toolkit that lays out an evidence-based methodology that K-12, postsecondary, and workforce development leaders in any state can use to approach this work with greater confidence. We encourage leaders to work across the sectors to identify which non-degree credentials have value, knowing that working in silos is inefficient and can result in conflicting signals being sent to students. Also, while our strategies focus on state-level actions that can be taken, we recognize that there are regional differences that must be taken into account and offer suggestions for how to address those variations.

The bar we have set for what counts as a high-value credential is one shared by all levels of our education and training systems: connecting learners to a job with a family-sustaining wage. This demands that K-12, postsecondary, workforce development, and industry leaders undertake this work together to identify and validate the credentials demanded by the labor market in high-skill, high-wage occupations; incentivize learners to earn them; and reliably collect data and report which credentials are earned and by whom. It is up to these leaders to propel many more students, especially those from underserved communities, to earn these credentials on a path to postsecondary success. The economy demands no less.

1 Advance CTE and Education Strategy Group. 2017. *Career Readiness & the Every Student Succeeds Act: Mapping Career Readiness in State ESSA Plans*. http://edstrategy.org/resource/career-readiness-the-every-student-succeeds-act/

Getting Started

Non-Degree Credential of Value Self-Assessment Tool

The collection of tools contained throughout this kit provide strategic and technical guidance to states committed to identifying and scaling attainment of non-degree credentials aligned to in-demand, high-skill, high-wage occupations. Before working with these tools, your state should establish a cross-sector team comprised of—at minimum—representatives from the state K-12 education (SEA), higher education, and workforce agencies to drive this work.

Once your cross-sector team is formed, start your work here with this brief self-assessment to better understand where your current practices are strong and where there is room for improvement. For each row, provide your state a score (1-3) according to the criteria provided in the rubric and note the supporting evidence that led you to this score. This toolkit has at least one tool that corresponds to each item in the self-assessment so that you can tailor your work around your state's unique areas of focus.

To download an electronic version of this tool, visit *http://edstrategy.org/resource/building-credential-currency/.*

Cross-Sector Collaboration			
Undeveloped (1)	Developing (2)	Established (3)	Score
The SEA, higher education agency, and state workforce agency do not collaborate to develop a cohesive list of priority non-degree credentials. There is little to no sharing of resources or data.	Collaboration between the SEA, higher education agency, and state workforce agency is limited and/or disjointed. Agencies may have different lists of priority non-degree credentials, and/or may rely on different or competing resources and data to achieve similar goals.	The SEA, higher education agency, and state workforce agency communicate and collaborate regularly to create a single cohesive state-level list of priority non-degree credentials. Resources and data are shared to drive work around common goals.	__ / **3**
Supporting Evidence:			

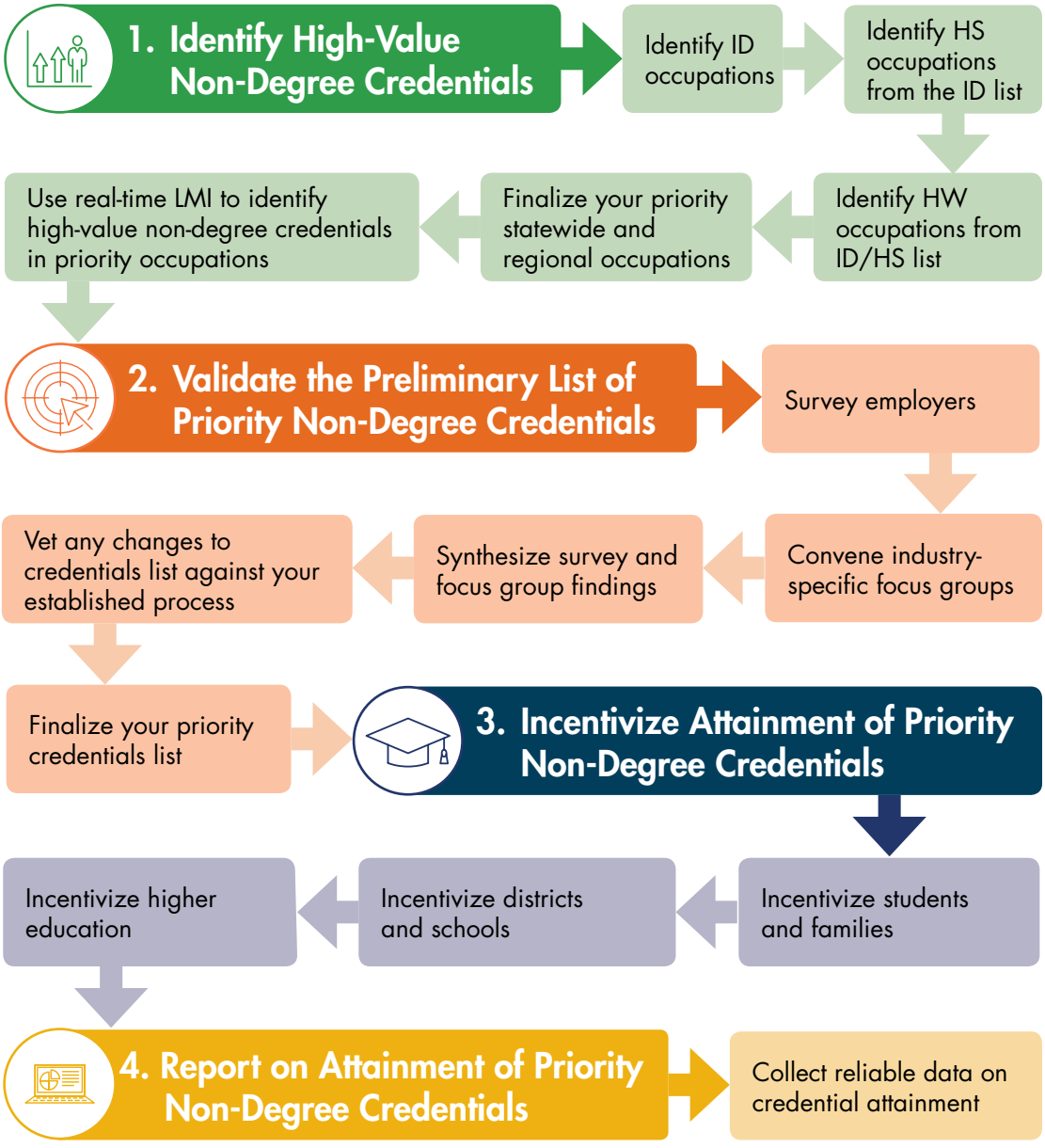
Identifying Priority Credentials			
Undeveloped (1)	Developing (2)	Established (3)	Score
Labor Market Forecasting			
The state does not identify priority in-demand, high-skill, high-wage occupations and associated non-degree credentials using labor market information.	The state identifies its priority in-demand, high-skill, high-wage occupations and credentials, but does not use rigorous thresholds for job demand, wage, *and* skill level. Different agencies may have different priority lists.	The state identifies its priority in-demand, high-skill, high-wage occupations and credentials using rigorous thresholds for job demand, wage, *and* skill level. The list of priority occupations and credentials is uniform across state agencies.	__ / 3
Employer Validation of Priority Non-Degree Credentials			
The state does not identify and convene employers representative of its priority industries, and/or does not engage this community in any efforts to confirm and validate statewide priority occupations and credentials.	The state engages major employers (e.g., WICs/Chambers) but does not engage a representative sample of its priority industries. Efforts to engage employers to confirm and validate statewide priority occupations and credentials are informal (i.e., personal outreach vs. surveys and focus groups) and/or disjointed across industries (i.e., different tools/outreach for different industries).	The state identifies and convenes employers representative of its priority industries and systematically engages them in planned, organized feedback loops—including formal surveys and focus groups—to confirm and validate statewide priority occupations and credentials.	__ / 3
Postsecondary Credit for Priority Non-Degree Credentials			
The state does not award postsecondary credit in a degree-granting program for priority non-degree credentials earned by students.	Postsecondary credit for priority non-degree credentials exists on an ad-hoc basis within the state (i.e., agreements between individual school districts/workforce programs and postsecondary institutions), but there are no statewide agreements.	There is a statewide process for granting postsecondary credit in degree-granting programs to priority non-degree credentials. The state may also be considering how it may count priority non-degree credentials toward its postsecondary attainment goal.	__ / 3
		Total Score Identifying Priority Credentials	__ / 9
Supporting Evidence:			

Incentivizing Priority Credential Attainment			
Undeveloped (1)	Developing (2)	Established (3)	Score
Cost-Barrier Removal for Non-Degree Credential Attainment			
The state lacks student-directed incentives and communications to increase the attainment of its priority non-degree credentials.	The state offers students some financial incentives to earn priority non-degree credentials, such as waived exam fees. Communication of incentives to students and parents is limited.	The state offers robust incentives to students—including opportunities to "cash in" credentials for other valuable goods like college credit (through established articulation agreements for priority credentials) in addition to financial incentives such as waived exam fees—and clearly communicates the value of these opportunities directly to students and families.	__ / 3
K-12 Incentives			
The state does not have an incentive structure (financial or otherwise) for districts and schools to support student attainment of priority non-degree credentials.	The state offers incentives to districts and schools for student credential attainment, but incentives are not differentiated based on credential quality.	The state offers incentives to districts and schools that are differentiated in proportion to the value of the credential earned by the student.	__ / 3
Postsecondary and Workforce Incentives			
The state does not have an incentive structure (financial or otherwise) for institutions of higher education and registered workforce training programs to promote student attainment of priority non-degree credentials.	The state incentivizes priority non-degree credential attainment either indirectly, through tuition support for postsecondary degree and/or certificate programs, or with direct funding for credential exams.	The state incentivizes priority non-degree credential attainment with funding—either indirectly through program tuition support or direct funding for credential exams. The state also includes priority non-degree credentials in its statewide postsecondary attainment goal.	__ / 3

For K-12, Incentivizing through Accountability and Reporting			
Undeveloped (1)	Developing (2)	Established (3)	Score
Non-degree credential attainment is not tracked in any accountability or reporting systems (ESSA accountability plans, school report cards, etc.).	Non-degree credential attainment is included in statewide accountability plans but not ESSA accountability plans and/or credential accountability is not limited in scope to only priority credentials aligned to in-demand, high-skill, high-wage occupations.	Non-degree credential attainment is included in both statewide and federal accountability plans and is limited in scope to only priority credentials aligned to in-demand, high-skill, high-wage occupations.	__ / 3
		Total Score Incentivizing Priority Credential Attainment	__ / 12
Supporting Evidence:			

Data Quality			
Undeveloped (1)	Developing (2)	Established (3)	Score
Data Collection			
The state does not collect any data on student credential attainment; or the data collected is only through self-report (by the district, school, or student)	Data collected on credential attainment is: (a) aggregate-level data, or (b) incomplete (i.e., only data on credentials earned is received, rather than all attempts, pass or fail).	Data collected on credential attainment is: (a) student-level data, (b) complete (pass and fail data), and (c) validated either by data-sharing agreements with exam vendors or other means.	__ / 3
Data Storage			
The state does not record student credential data in its longitudinal data system or other student information systems.	The state's data systems: (a) cannot differentiate between credentials, (b) record incomplete information (i.e., passes only), and/or (c) limit the number of credential attempts that can be recorded per student.	The state's data systems can record information on credential name, exam date, and exam result for each credential attempt a student makes.	__ / 3
		Total Score Data Quality	__ / 6
Supporting Evidence:			

Overview of Essential Steps to Identify, Validate, Incentivize, & Report on Non-Degree Credentials



ID: In-demand
HS: High-skill
HW: High-wage
LMI: Labor market information

1. Identify High-Value Non-Degree Credentials

Process to Create a Preliminary List of Priority Non-Degree Credentials

This tool is the first in Education Strategy Group's Building Credential Currency *toolkit and presents a step-by-step, evidence-based guide to identifying high-value credentials within priority occupation areas. Though many states already offer and track attainment of non-degree credentials, current processes are often either too broad, including non-degree credentials regardless of their currency in the labor market, or too siloed, with each state agency owning a different list of priority credentials and/or incentivizing and monitoring processes. This tool provides a technical model for states to refine and strengthen their process to assemble a unified, statewide list of priority non-degree credentials—those that are necessary to either gain employment or advance in an in-demand, high-skill, high-wage occupation.*

Because the purpose of this tool is to develop a statewide list of priority credentials, it is critical that toolkit users ***first assemble a cross-sector team to lead this work.*** This team should include both policy and data experts from, at minimum, the state's K-12 education agency, higher education office, workforce development agency, or economic development agency.

I. Identify *in-demand* occupations in your state.

Before classifying the value of non-degree credentials themselves, it is necessary to first identify your state's high-wage, high-skill, in-demand occupations in which these credentials exist and hold value. The first step of the process is to identify occupations that are in-demand. Those that are also high-skill, high-wage will be derived from your in-demand list.

NOTE: While the process outlined here works for any type of credential and at any geographic level, we focus specifically on identifying **non-degree** credentials aligned to in-demand, high-skill, high-wage occupations within a **state.** Additional description is provided throughout the tool regarding how states can modify this process to undertake analyses at regional levels.

1. Find occupation projections for your state.

Your state's WIOA plan—which should include analyses of projected job growth at the occupational level—is an excellent starting point for finding occupation projections, but it requires asking some critical questions.

As you review your WIOA plan and its analyses, answer the following questions:

- How old are the analyses included in the WIOA plan? If the analyses are more than three years old, you'll likely want to update them for a more current understanding of economic trends.
- How far into the future do projections stretch?

- Do you need updated projections? If yes, where and with whom does this work live?
- Do you have all of the information needed to provide occupational-level data on both the *number of jobs* and *percent job growth* over a given time period? Can data be further disaggregated to differentiate between new job creation (real job growth) and current position vacancies? If no, do you have the ability to get that information?

If your WIOA plan's analyses are outdated or incomplete—or if you want to cross-reference and validate information from your WIOA plan—you may use a publicly accessible resource to undertake additional analyses, like Projections Central, which is provided by the Department of Labor, Employment, & Training Administration and provides state-level occupation projections. Some resources in your own state, like your State Department of Labor or Economic Development, may also provide occupation data and reports helpful to determining in-demand occupations.

Note that traditional employment projections like these may themselves be incomplete sources of information. For example, traditional federal projections do not capture agricultural occupations; and, in fact, many agriculture-aligned occupations may be organized under other industries (for instance, food production is often found under manufacturing). If your state has a significant agricultural industry, you may need to identify additional sources of data to complement your traditional projections. New and emerging occupations may also be difficult to capture through traditional projections—especially those that are long-term. Projections Central, for instance, provides both long-term (10-year) and shorter-term (5-year) projections. For states experiencing rapid industry change, it may be more appropriate to conduct more frequent analyses using shorter-term projections. Alternatively, you may complement traditional employment projections (long- or short-term) with real-time labor market analyses to capture these new and emerging fields through job postings data. (See more on real-time labor market tools below, in Section V.)

REGIONALIZE YOUR WORK, PART 1

While the process laid out in this tool provides a roadmap for users to develop a statewide priority occupations and credentials list, your state's economic landscape may also benefit from a regional analysis. If your state is relatively homogenous from region to region, the process detailed here will likely meet your needs. If your state's workforce needs vary dramatically from region to region—for example, if there is a large port industry on the coast, or if your state has both very rural and very urban areas—you may consider applying a regional lens to this analysis.

While the labor market resources provided in this process—such as Projections Central, O*Net, and others—all provide useful state-level data, many do not provide similar data at regional or local levels. Even where sub-state data are available, regional groupings may not map to your state's definition of regional boundaries. Teams seeking to conduct a regional analysis of priority occupations should look for data resources within your state—likely housed in your state workforce or economic development agencies—to use in this process.

2. Determine a threshold for defining "in-demand."

What does it mean for an occupation to be in-demand? All occupations experience job loss and gain on some scale—distinguishing between "normal" fluctuation and high-growth change is crucial to narrowing your state's priority list to those jobs that are experiencing significant growth.

This process should consider occupational demand in both *raw job numbers* and *percent growth*. The largest industry in your state may not be the fastest-growing and vice versa, but both high-volume and high-growth occupations are valuable to your state's economy.

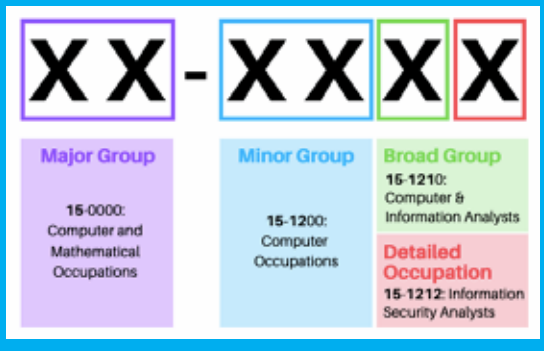
This process should also consider *changes in demand over time*. The economy is constantly changing: Occupations demanded today may not be in-demand in ten years. Those in-demand in ten years may be just now emerging.

Many states that have established this practice have set both growth rate and annual opening thresholds that must be satisfied for an occupation to qualify as in-demand. Setting both a current openings threshold and a projected growth threshold is important to demonstrate that these occupations are currently in-demand and will remain so in the near future. Florida, for instance, requires occupations to demonstrate 500 annual openings plus an average growth rate of 1.26% *or* 1,200 annual openings plus any positive growth. Other states consider rates higher than the aggregate state job growth to be "in-demand."

3. Remove any occupations that do not meet your defined threshold.

Compare occupation projections gathered in Step 1 against the demand threshold set in Step 2. Those that meet or exceed the threshold are your in-demand occupations. For each of these occupations, be sure to record the SOC (Standard Occupational Classification) codes, which classify workers into common occupational categories as described in the text box below. These will be used as a common, unique identifier throughout the rest of the process to identify your state's in-demand, high-skill, high-wage occupations.

SOC CODES



The Standard Occupational Classification (SOC) system is a tool developed by the federal government that assigns each occupation and occupational category a unique, six-digit identifier. These six digits represent each occupation's major group, minor group, and broad occupation. Currently, there are 23 major occupational groups, 98 minor groups, and 459 broad occupations—resulting in 867 unique occupations as of 2018.

Note: As you use SOC codes to merge data from multiple sources, make sure that each dataset uses the same version of the SOC system to control for any possible changes made to the classification of occupations.

II. Identify *high-skill* occupations from your in-demand occupations list.

States should go further in identifying the occupations that are in-demand. Too often, occupations have many job openings, but those jobs do not offer a career path with a family-sustaining wage. States should whittle their in-demand occupation list down to those that are also high-skill and high-wage.

Determining whether an occupation is "high-skill" requires analyzing the educational and training requirements of a given occupation against a given threshold. States may use the following process to determine which of their in-demand occupations are also high-skill.

1. Set a threshold for defining "high-skill."

What does it mean for an occupation to be high-skill? At a *minimum*, "high-skill" should refer to occupations that require education or training beyond a high school diploma—but criteria can be more robust.

O*Net, a publicly-available and federally-sponsored database for occupational information, provides one example of robust skill definitions by assigning occupations to one of five "Job Zones."[2] States should use Job Zone Three as the high-skill threshold, as this level captures occupations that require, at *minimum*:

- Education beyond a high school diploma;
- Training lasting anywhere from a few months to one year—including apprenticeships;
- A period of "specific vocational preparation"[3]—the amount of lapsed time in job-specific training needed for a worker to demonstrate average performance in job-specific situations—lasting one to four years; *and*
- Previously gained work-related skills, experiences, or knowledge.

2. Determine the education and training requirements for each of your state's in-demand occupations.

Because O*Net records education and training information for each occupation, it is again a useful tool to use here. While this information can be accessed very easily for individual occupations through a simple search on O*Net OnLine, this process is very time-consuming when attempting to match multiple occupations to their education and training requirements.

For bulk matching, O*Net's API (Application Programming Interface) is easy to access and use to extract education and training data for multiple occupations—using SOC codes as a key—at once.

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2 O*Net OnLine. "O*NET OnLine Help: Job Zones." Accessed November 27, 2018. https://www.onetonline.org/help/online/zones#zone3

3 O*Net OnLine. "O*NET OnLine Help: Specific Vocational Preparation (SVP)" Accessed November 27, 2018. https://www.onetonline.org/help/online/svp

3. Remove all occupations for which education and training requirements fall below your state's high-skill threshold.

The occupations that remain are your in-demand, high-skill occupations.

TIP! As you move through this process, keep track of each step and identify where occupations and credentials fall off your state's list. Stakeholders who want a particular occupation and/or credential included will ask why it did not make the list. Have the information ready to share with these stakeholders to justify your decision.

III. Identify *high-wage* occupations from your in-demand, high-skill occupations list.

Similar to the process above, determining which of your state's in-demand, high-skill occupations are also high-wage requires setting a wage threshold against which to analyze the occupations on your list. States may use the following process to determine whether their in-demand, high-skill occupations also meet high-wage criteria. This critical step ensures that your state is prioritizing and incentivizing occupations that enable workers to earn wages to support their families.

1. Set a threshold for defining "high-wage."

What does it mean for an occupation to be high-wage? This step requires identifying a "family-sustaining" or "living" wage, or the wage at which the basic needs—including food, shelter, healthcare, childcare, and transportation—of a family (at least one adult and one dependent child) can be met. This "family-sustaining" wage varies based on a particular geography's cost of living, but is often greater than the established minimum wage, and may also exceed your state's WIOA wage threshold. Researchers at MIT estimate that in a family of two adults and two children, both adults would need to work two minimum-wage jobs (77 hours per week) to earn a sustaining wage. One adult with two dependent children would need to work closer to three and a half minimum-wage jobs.[4]

While there are a number of resources available to help states make high-wage determinations, the MIT Living Wage Calculator is an excellent choice for this step. This Calculator estimates the cost of living in a given state, city, or metropolitan area based on typical expenses in that area.[5] In setting a high-wage threshold, states should use estimates for *at least* one adult with one dependent child, as increasingly more students and workers care for at least one dependent.

4 MIT. Accessed January 8, 2019. http://livingwage.mit.edu/articles/15-minimum-wage-can-an-individual-or-a-family-live-on-it

5 MIT. Accessed December 19, 2018. http://livingwage.mit.edu/

2. Determine the median wage of each occupation on your in-demand, high-skill list.

The Bureau of Labor Statistics' Occupational Employment Statistics program provides employment and wage data at the national, state, and metropolitan level. Select the most recent data for your state and, using the SOC codes for your in-demand, high-skill occupations, record the median hourly wage for each occupation.

3. Remove all occupations for which the median wage falls below your state's high-wage threshold.

The occupations that remain represent your state's ***preliminary*** list of in-demand, high-skill, high-wage occupations.

IV. Finalize your *in-demand, high-skill, high-wage* occupations list.

1. Review your list for potential errors or anomalies.

Now that your preliminary list has been generated, review the remaining occupations to ensure that each is truly aligned to the priority industries in your state. As an example, if "hospital chef" is on the list as an occupation in your state's healthcare industry, you may consider removing it. While this represents a real job, the training and preparation for a career as a chef aligns not with healthcare, but with food services and hospitality, and probably should not be prioritized within the healthcare industry itself. While SOC codes provide a generally reliable guide for identifying occupations, crossovers like this exist and should be acknowledged during your analysis. Ideally, the model that your state has built in the above steps will filter out the majority of unaligned occupations, but some anomalies may remain. Make sure to check your work!

As an additional safeguard, this list—along with the list of related priority credentials you generate next—will be vetted and validated by the employer community.

TIP! The process laid out here focuses primarily on identifying the non-degree credentials that connect directly to priority occupations, but the road to an in-demand, high-skill, high-wage job is not always a straight path. Some credentials, though they do not lead directly to employment in priority occupations, act as a stepping-stone toward a meaningful career—either by preparing holders for a higher-level credential or by its application toward postsecondary credit. If you uncover credentials like these in your analysis, your team may want to consider additional work to identify and build career "lattices" to examine the opportunities these credentials lead to in the long run.

V. Establish a preliminary list of *priority credentials* that correspond to your in-demand, high-skill, high-wage occupations list.

Congratulations! Your state has created a data-driven list of in-demand, high-skill, high-wage occupations within its priority industries. You're now ready to identify the non-degree credentials—especially industry-recognized credentials—associated with jobs in those occupations. These next steps model a process for identifying these credentials using real-time labor market data and a direct application. Additionally, if your state agencies already collect credential data in some capacity, your team could use that data in a longitudinal analysis to determine whether and which credential holders have an advantage in the labor market.

1. Use real-time labor market information to identify priority credentials.

a. Identify your real-time labor market information tool(s).

There are a number of good resources available for this process, including services like Burning Glass, EMSI, and JobsEQ. Your team should confirm whether any state agency already has a subscription to one of these services. If there is no current subscription, investigate each tool to determine the best fit for your state.

TIP! Real-time labor market technologies—those that aggregate job posting and/or resume data from the web—are relatively new tools that may not return complete and comprehensive data on various degrees and credentials required for employment—especially with many industries now removing specific education requirements from their job postings. If the information returned from these tools is incomplete, you will want to rely more heavily on employer input and validation to identify your priority non-degree credentials. See the next section of this toolkit for more information on employer validation strategies.

b. Using the tool(s) you identified above, pull a report of the current job postings in your state.

Fields to include in your report are:

- Job title
- Company name
- Company address
- Education level (required and preferred)
- Credentials (required and preferred)
- Skills (required and preferred)
- Work experience (required and preferred)
- Salary or wage (if provided)
- Related industry or occupation (if provided)
- Number of positions (if the posting is for multiple positions and that information is provided)
- Date of Posting

CAUTION! One job post ≠ one open position. When pulling together your real-time labor market report, be aware that there is not a one-to-one match between job postings and open positions. Many companies post the same job description across multiple hiring sites for the same position. Conversely, companies might also post one, relatively generic job description to recruit for multiple of the same position. Your team's data lead should be aware of these inconsistencies and build controls (such as weights), where appropriate, into the reporting routine.

c. Map job postings data to your priority occupations.

To determine which job postings are aligned to your state's in-demand, high-skill, high-wage occupations, link the two datasets. While your occupations each have a SOC code, it is unlikely that job postings contain this information. Luckily, there are tools available to assign job postings to SOC codes using job titles and descriptions. Some real-time data sources, like JobsEQ, have this functionality built into their products. If this service is not offered as part of your real-time data software, use a publicly-available tool like O*Net's SOC Autocoder. The SOC Autocoder enables matching based on job title either by a simple, single job title search or through its web services, which allow for bulk matching using the site's API.

Once job postings have been assigned SOC codes, your state should group those postings by occupation. Remove any that do not match your state's in-demand, high-skill, high-wage occupations, as well as any duplicate postings (as the same posting may show up across several job posting sites).

REGIONALIZE YOUR WORK, PART 2

As noted above, it may be useful to your state to conduct a regional analysis of priority occupations and credentials. If you have decided to create a statewide priority occupations list but want to determine the distribution of demand for priority occupations and credentials across your state's regions, you might consider using your real-time labor market data source to break down credential demand by region. The job posting data you collect here should include information about each posting's location (specifically company address), which you can use to group data by state economic region. For instance, if your state's economic regions are groups of ZIP codes, you can apply the same grouping to the location data returned in your search.

Based on this grouping, reflect on the following questions:

- What new or interesting patterns emerge?
- Are some priority occupations clustered in certain regions, or are they spread relatively evenly across the state?
- Does a particular industry exist throughout the state but request different credentials or levels of education in different regions?

d. Identify credentials that are required or preferred for those jobs. Within each of your in-demand, high-skill, high-wage occupation groups, determine the following:

- Do patterns emerge in terms of the credentials required or preferred for employment? If yes, which credentials are they? How frequently are they featured?
- Do similar patterns emerge among education levels, skills, and work experience?

e. For each occupation, record the credentials that frequently occur.

Because the work of mapping non-degree credentials to priority occupations is relatively nascent in many states, there is not an established precedent for defining a frequency threshold. Your team should think critically about where and how to set this threshold and document your logic to justify your decision. To guide this process, consider the following questions:

- What percent (or number) of unique job postings within a given occupation must require or prefer the credential for it to qualify as a priority?
- How many (or what percent of) unique employers' job postings must require or prefer the credential for it to qualify as a priority?
- Must the credential be demanded across multiple occupations or job titles to qualify as a priority?

Once you have set your threshold and identified the credentials that meet or exceed it, you have successfully developed your state's preliminary list of priority non-degree credentials.

REGIONALIZE YOUR WORK, PART 3

As introduced in the textbox on page 12, your state may also want to identify priority non-degree credentials at a regional level. If your state is using a direct application, you may consider building space in the process to ask applicants about local priority occupations that are *not* already included on your state's priority list. Depending on your state's economic landscape, there may be occupations (or whole industries) that are large enough to comprise a significant proportion of a regional economy, yet small enough that they are excluded from a statewide list. In this case, you may consider building a space for "regional priority occupations" in the direct application, allowing regional leaders to bring these occupations and credentials up for consideration.

Establishing a "regional-specific" tier does not mean that anything goes, however. Though a regional tier may take into account a regional demand threshold, *all* credentials collected in the application should go through the same rigorous process to ensure that they meet high-skill and high-wage thresholds. If your state goes this route, you will also want to consider whether regional credentials are incentivized to the same degree as statewide priority credentials. For more information on setting incentives for non-degree credential attainment, see the Incentivize section of this toolkit.

2. Optional: Use a direct application process to identify potential priority industry-recognized credentials.

In addition to the state-led process described above, your state may also choose to incorporate a direct application process to allow relevant stakeholders—such as employers, industry advisory councils, and school districts—to propose non-degree credentials, including industry-recognized credentials (IRCs), for consideration on the state's priority list. This is especially useful for identifying emerging IRCs—which may not be in high demand yet but are increasingly growing in popularity and relevancy—as well as IRCs that are very high-value at the local level but did not emerge at the state level. Because these credentials do not appear at your required threshold levels within real-time LMI, your state will need to collect more information about them to determine whether or not they meet your bar for quality.

a. Determine which stakeholders can submit an application.

Stakeholders that could see a direct financial benefit to having a credential on your state list—like credential exam vendors—should not be eligible to submit an application. You may decide to receive applications from a variety of other stakeholders, including:

- Employers
- School districts
- State and local workforce boards or industry advisory councils
- State and local economic development boards
- Regional or state business and trade organizations

b. Identify the mandatory application components.

Basic application information should include:

- Name of the proposed credential
- Credentialing agency and contact information
- Confirmation that a third party administers the credential exam *(Credentials that are not administered by a third party should not be recognized on the priority credential list.)*
- Credential website *(If information about a credential is not posted publicly on an official website, this might be a signal about the value and validity of that credential.)*

Applications should also ask applicants to provide additional information about the credential:

- Is workplace experience required to earn the credential? If so, how much?
- How many hours of instruction or training are required to earn the credential?
- Is a high school diploma a pre-requisite to earning the credential?
- Is there a minimum age for earning the credential? If yes, how old must a person be to earn the credential?

- Does this credential have a pre-requisite credential? If yes, what is that preliminary credential or set of credentials?
- For how long is the credential valid? Are there re-certification requirements? If yes, what are those requirements?

Credential Value

- Is this credential a pre-requisite to more advanced credentials? If yes, what are those advanced opportunities?
- To which in-demand, high-skill, high-wage occupation(s) is this credential aligned?
- What evidence exists that this credential is required or preferred for employment within in-demand, high-skill, high-wage occupation(s)?

Logistics

- In what formats is the credential exam offered? Computer-based? Paper-based? Both?
- Is there a performance-based component to the assessment?
- Must the exam always be administered in a proctored environment? If yes, who can proctor? *(If certifying bodies allow for an online, non-proctored setting, this may signal low validity.)*
- (If relevant) Where are testing sites located throughout the state?
- What procedures are in place by the credentialing authority to review exams for testing irregularities?
- How many questions are in the credentialing exam?
- Is there a time limit for the exam? If yes, how long do test-takers have to complete the exam?
- What is a passing score for this exam?
- Can test-takers re-take the exam? If yes, how much time must pass before re-taking the exam?
- What is the cost per exam?
- To whom is test result data made available by the testing vendor? Are data sharing agreements in place for state agencies or school districts to access test data?

c. Build an application review team.

Your state's credential review team will examine each application to ensure it meets the established criteria for credential eligibility. This includes ensuring that all requested information has been provided on the application. The review team should include members of your cross-sector team, and may include additional input from individuals in the following entities:

- State workforce board
- State department of labor
- Industry advisory councils
- Career cluster councils
- State department of education
- State higher education system

d. Review and *preliminarily* approve applications.

The individual(s) identified above will conduct a thorough review of each application and preliminarily approve credentials for consideration. At this time, it should be made clear to applicants that this is not a final approval: All credentials must proceed through additional analyses to ensure that they meet the requirements of in-demand, high-skill, high-wage occupations.

During this review, it may be helpful to create a structured rubric for evaluating applications. Creating structured, standardized options for flagging a credential's potential deficiencies (for example, that a credential can be earned outside a proctored environment) will enable your team to have documented justification for decisions to preliminarily approve or reject an application.

e. Conduct the same rigorous analysis of labor market information for each "approved" credential.

Each credential that has been preliminarily approved through an open application process must be held to the same rigorous standards as the other non-degree credentials identified by the state with real-time labor market data. That is, they must be able to prove alignment to one or more of your state's in-demand, high-skill, high-wage occupations and significance in the hiring process.

Because some of these credentials are only emerging in value to employers and/or have value limited to local marketplaces, they may be scantly represented in your state's labor market data. In those less than ideal circumstances, your state may institute a separate process as a proxy for data-driven labor market value. This process might include applicants submitting "credential verification letters" from at least five relevant employers that compellingly describe how they rely upon that credential in their hiring, promotion, and salary determination processes.

f. Update your priority credential list.

Add the credentials approved by your review team to your preliminary list of priority non-degree credentials.

IMPORTANT! Even within a "priority" list, not all credentials have the same value in the labor market. Certain credentials that you have identified through this process (or will incorporate through the validation process in the next section) may connect earners to jobs that pay higher wages, offer more opportunities for advancement, etc. than other credentials; and certain credentials may be required for employment while others are only recommended or strongly preferred. Your state can choose to treat all priority credentials equally, or you might differentiate between credentials within your priority list. Many states apply a ranking or weighting structure to their priority credentials, and differentiate incentives accordingly. See the Incentivize and Report sections for more information on weighting credentials by level of priority.

3. Optional: Validate the preliminary list of priority non-degree credentials with a tool like Credential Engine.

Being frequently included as either preferred or required in job postings is a clear signal that a credential is valued by employers; but it is worth confirming that the credential has also been validated by an accrediting body—usually an institution of higher education or a professional association. While still being developed, Credential Engine's Credential Finder is one tool that states can use to find credentials that have third party quality assurance; and it will become increasingly useful as more institutions add their data to the system.

2. Validate the Preliminary List of Priority Non-Degree Credentials

Validation Step 1: Process to Survey Employers

Your state has completed a lengthy, data-driven process to identify in-demand, high-skill, high-wage occupations within priority sectors and related non-degree credentials that are needed or highly recommended to secure jobs. While that process has created a strong preliminary list of priority non-degree credentials, your state should now work with employers to validate it, i.e., confirm that they do in fact rely upon those credentials in their hiring, promotion, and salary decision-making practices.

To accomplish this, your state should first survey employers within priority industries to get broad feedback from the field as described below. Once that has been done, your state should convene focus groups of select employers to further test and validate the preliminary list, which is described later in this toolkit.

Your state's online survey should be designed to reach a representative sample of employers within your priority industries. Survey questions or statements should solicit feedback that helps you confirm (or refute) that credentials on your state's preliminary list are high-quality and valued by employers. The following steps offer guidance on the process of designing, administering, and analyzing surveys of employers as a first step in the process of validating your state's preliminary cross-sector priority credential list.

I. Design and build your state's survey.

Survey design extends beyond crafting the right questions to ask—although this is a critical step—to identifying your target audience ahead of time. To yield reliable information and get the clearest sense of the economic landscape, your survey should target a representative sample of employers and direct questions to the appropriate point of contact within each organization. The steps below outline the process for identifying the right audience for your survey; and a complementary tool provides a sample survey structure that your team can use to get started.

1. Identify who will lead the development, administration, and analysis of surveys.

Just as your state took a cross-sector approach to developing its preliminary list of priority credentials, so too should you bring leaders from K-12, postsecondary, and workforce development together to validate, refine, and finalize that list. In selecting members to serve on this cross-sector team to survey employers, consider these questions:

- What capacity and resources will be needed to design, administer, and analyze results of an online survey?
- Who from the state's K-12, postsecondary, and workforce development agencies brings that capacity to the work? What role will each play?

- Are there considerable advantages to distributing responsibilities across state agencies rather than consolidate them in a single agency? For example, might one agency be especially well suited to design and develop the survey while another leads the administration and analysis of survey results?

2. Identify target industries for the survey.

The primary objective of the survey is to confidently determine that your state has identified the non-degree credentials that are required or preferred for employment in your in-demand, high-skill, high-wage occupations. It is imperative then that you direct your survey to the industries in which these occupations are found as described in the steps below.

- Your state should revisit its identification of priority industries that emerged from your analysis of labor market data. Those industries are your target markets for this survey.
- Determine the share each of these industries represents in your state economy. For example, Information Technology may represent 40% of workers in your state's economy while Advanced Manufacturing may only represent 10%.
- Make certain your statewide "priority industry map" reflects those size differences so that it can be used to first develop strategies to ensure your eventual survey sample is representative of your state's employer base; and second guide your outreach to companies within those priority industries.

3. Identify target employers/companies within those priority industries.

Using your statewide industry map, you should next identify employers/companies within those industries that represent your state's in-demand, high-skill, high-wage occupations. You might leverage your existing network to help you with this task, which may include consulting:

- State and local Chambers of Commerce
- State business and industry associations related to each priority industry
- State and local workforce development boards
- Industry Advisory Councils

Senior leaders within these groups should recommend specific employers (and a related point of contact) to participate in the survey. In addition, you might ask if the organizations above would be willing to send out the survey on behalf of your state since they have a personal relationship with target employers.

While those organizations will be helpful in identifying an initial set of target companies, you will need to consult an additional resource to build a more comprehensive group of respondents that represent your in-demand, high-skill, high-wage occupations in your state. A public resource like the CareerOneStop Business Finder may be helpful, which catalogs employers in your state by the type of business, the related industry, and the number of employees within specific companies. It can be filtered by these criteria as well as by zip code to identify businesses that meet your criteria.

4. Ensure that the identified employers form a representative sample for surveying.

Now that you have a list of target employers, your state should refer back to the industry map (created in step 2 above) to identify the number of employers you seek to survey in each priority industry to ensure that you are gathering feedback from a sample that is representative of your state's employer base. [Note: you will need to run a statistical test to confirm that the number of target employers by industry are not statistically different from each industry's overall representation as shown in your state's priority industry map.] Each industry sample size may vary depending upon the number of employers in your state. In addition, you should check your list to ensure that it includes large and small employers from all regions of your state.

5. Identify a contact person within each company to complete the survey.

For each employer on your state's list, identify a contact person who understands the education, skill, and credentialing requirements for positions in their company and is involved in recruiting and hiring prospective employees. (Remember the organizations listed in step 3 above that can help with this task.) This person will vary depending upon the size of the targeted company. For example:

- **Companies with 15 or more employees** will generally have a Human Resources department that handles recruiting and hiring candidates. Specialists within those departments who can serve as helpful points of contact include Human Resource Managers, Directors of Employment and Recruitment, Talent Acquisition Managers, Technical Recruiters, and Hiring Managers.
- **Companies with less than 15 employees** likely position the owner to handle hiring decisions since he or she best understands the knowledge, skills, and credentials needed to fill current or projected roles.

6. Design your survey to be completed by your identified employers.

NOTE: Your state may opt to modify the sample survey provided later in this toolkit for use within your survey practices.

Next, your cross-sector survey team should build a survey that presents the preliminary list of priority non-degree credentials to identified employers and solicits their feedback on the value of those credentials. Surveys should enable your state to collect a variety of data from respondents that you will later use in analysis to determine which credentials remain on the list, and which should be excluded. Your state should ask questions about the size and location of the companies the employers represent; the professional role of the employer respondent; the extent to which he/she uses each of the credentials in hiring and promotion practices; and the extent to which each of the credentials demonstrates that individuals have the knowledge and skills to secure in-demand, high-skill, high-wage jobs.

II. Administer surveys.

There are a number of important details your state must consider and plan for when preparing to administer your survey on priority non-degree credentials. Your cross-sector team should answer each of the following questions together and build those responses into its survey administration plan.

1. Technical preparation

- Where will your state host the survey? What survey software will you use? Do you have an existing membership with a survey software provider, like Survey Monkey, that can be used for this administration?

2. Logistical preparation

- What is the ideal timeframe for administration? Is there a particular date by which the list of priority credentials needs to be finalized for use by school districts and/or higher education institutions in the next academic year? Is there a particular timeframe that is better or worse for employers to respond?
- When will your state open the survey window? How long will the survey remain open? (A two-week administration window is common.)
- Have you collected email addresses of target respondents and loaded them into your survey software?
- Have you contacted your target respondents to remind them that they will soon receive an email asking them to complete the survey and reminding them of the ways in which their participation will be helpful to students and to their own talent sourcing priorities?

3. Survey administration

- As your state prepares to launch the survey, how will you utilize organizations within your network, like those listed in Section I, Part 3, to help you push the survey out to target employers and increase response rates? If so, which groups will you enlist, and how will you leverage them?
- Once your survey has "gone live," in which industries are you getting good response rates, and in which industries might you need to remind target employers to respond to the survey? What outreach is needed to motivate employers to respond?

III. Analyze and summarize the results of the survey.

At the end of your state's survey window, you will close the survey and retrieve respondent data from your survey software. The goal of this stream of work is to analyze the feedback from employers to better understand their opinions regarding which of the non-degree credentials on the preliminary priority list should remain, and which (if any) should be removed.

The following guidance and questions are intended to help your analysis and decision-making by identifying the ways in which your state should review and consider the survey data.

1. First, identify the survey response rate by industry.

Check to determine whether you have you received an adequate number of responses from each industry such that the response rate is representative of your priority industry sectors. [Note: This will require running a test of significant difference to ensure that differences in response rates by industry are not statistically different from each industry's overall representation as shown in your state's priority industry map.]

- Have you collected survey responses from both small and large employers? Do the responses represent employers statewide?
- If the survey responses are not representative of your priority industries, which employers have not responded that need to do so? What additional outreach should you make to those employers to convince them to complete the survey?

2. Analyze the responses from your representative sample by industry to assess the value of the non-degree credentials included in the survey.

Your analysis should attempt to answer the following questions:

- Have the employers responded to questions on appropriate credentials? (For example, have healthcare employers responded to questions regarding non-degree healthcare-related credentials?)
  - In the event that employers have responded regarding credentials out of their field, their responses should be pulled from the data set. At this time, you will need to confirm that you still have a representative sample.
- For every credential on the preliminary list, what percentage of respondents said that the credential is required for a job?
- For every credential on the preliminary list, what percentage of respondents said that the credential is preferred for a job?
- For every credential on the preliminary list, what percentage of respondents said that the credential is not important to a job?
- For every credential on the preliminary list, what percentage of respondents indicated that they were not familiar with a particular credential?

3. Determine whether responses vary according to the size or location of the employer.

- What percentage of small employers, medium employers, and large employers (your state may decide the threshold for these categories) agree that each credential is required for a job? Preferred for a job? Not important for a job?
- What percentage of employers in each of the regions of your state (as described in your survey) agreed that each credential is required for a job? Preferred for a job? Not important for a job?

4. As a cross-sector state team, determine a threshold to use in making decisions about which credentials remain on the list and which should be removed.

For example, do 50% of employers in any given industry need to agree that a credential is not important to a job in order for a credential to be removed? Would 35% suffice? What constitutes a "preponderance of the evidence"? Note that whatever threshold you decide upon should be uniform for decision-making across all industry and occupation areas.

5. Identify data/questions that will need to be investigated further through focus groups.

- Are there inconsistencies in responses that need to be investigated further?
- Can your state create graphs and/or charts that represent the results of your analyses that highlight trends, alignment of responses, and disagreement within responses?
- Is the threshold set by the cross-sector team to remove credentials from the priority list rigorous enough? (You want those employers to validate your state's decision on thresholds.)

6. Revise the preliminary list of non-degree credentials according to the thresholds that have been determined by your cross-sector team.

This is the list that you will vet with focus groups as described later in this toolkit.

Sample Employer Survey

This sample survey is included within the toolkit to give states a ready-made option for survey administration. Cross-sector state teams may adapt and adopt this survey and administer it as described in the guidelines above to determine the extent to which a representative sample of employers from in-demand, high-skill, high-wage occupations agrees each non-degree credential should be included on the state's priority list. ***To download a customizable version of this tool, visit*** *http://edstrategy.org/resource/building-credential-currency/*.

Introduction (Page 1)

{STATE NAME} has drafted a list of priority occupations and related non-degree credentials to send clear signals to K-12, higher education, and workforce development leaders about the credentials that matter most to good jobs in our state. We thank you in advance for responding to this survey, which is designed to take no more than 10 minutes of your time.

To be deemed "priority," occupations must have met or exceeded *each* of the following thresholds in a robust economic analysis of state labor market data:

- In-Demand: *{insert state definition for "in-demand" or threshold}*
- High-Skill: *{insert state threshold for "high-skill"}*
- High-Wage: *{insert state threshold for "high-wage"}*

For each priority occupation, we have identified existing non-degree credentials that individuals can earn to both access jobs and advance through a career field. Our next step is to validate these occupations and credentials with you, the employer community, and confirm that these are the right credentials to prioritize within your industry.

General Questions (Page 2)

1. In which region(s) are you located? Choose as many as applicable.

{List specific options from which to choose, corresponding your state's preference for regional/county/local terminology.}

2. What is the approximate size of your company? (Round to the nearest 10.)

{Short open-ended response; rounding up to the nearest 10 will provide better, more flexible data than arbitrary multiple choice tiers.}

3. For which of the following professional industries will you be providing feedback?

{List the state's priority industries. Respondents should be asked to provide feedback on priority occupations/credentials within the industry in which they work. This can vary from respondent to respondent. For example, healthcare professionals in hospitals could select "healthcare," while IT professionals in hospital settings could select "IT." If your target respondent is an HR leader, they may also have the option to complete the survey for multiple industries, e.g., healthcare and IT.}

{The following sections should be populated based on the response selected in #3.}

Occupation Validation (Page 3)

4. The following occupations within the *{INDUSTRY NAME—populated based on response in #3}* industry have been identified as priority occupations based on job demand, skill requirements, and median wage. Based on your experience and knowledge, **please select any occupations you believe DO NOT meet the criteria for in-demand, high-skill, *and* high-wage occupations. For each occupation you believe should be removed, please provide your reasoning for removal.**

Occupation	**Should be Removed from Priority List**	**Rationale for Removal** *{dropdown: not in-demand, not high-skill, not high-wage, combination of factors, other}*	**Open-Ended Rationale for Removal:** Please expand on your selection in the previous column.
Occupation 1	○ Yes ○ No		
…			
Occupation n	○ Yes ○ No		

5. Are there any occupations in your industry that are *not* on the priority list above that you believe should be considered for inclusion in the next cycle, based on projected job demand, skill requirements, and employer earnings?

   ○ Yes

   ○ No

6. If you answered "Yes" to the question above, please list those occupations here.

Credential Validation (Page 4)

7. The following non-degree credentials within the *{INDUSTRY NAME}* industry correspond to identified priority occupations. **Based on your experience and knowledge, how important is each credential in deciding to hire or promote an individual?**

Credential	**Required:** This credential is *required* to hire/promote.	**Preferred:** This credential is preferred, but not required, when considering decisions to hire/promote.	**Not Important:** This credential is not relevant for decision-making.	**I am not familiar with this credential.**
Credential 1	○	○	○	○
…				
Credential n	○	○	○	○

8. Are there any non-degree credentials in your industry that are *not* on the priority list above that you believe should be considered for inclusion in the next cycle, based on alignment to in-demand, high-skill, high-wage occupations?

   ○ Yes

   ○ No

9. If you answered "Yes" to the question above, please list those non-degree credentials here (no abbreviations). Please do not include proprietary credentials specific to your organization.

10. Are there any occupations in your industry that are particularly difficult to fill because prospective employees lack the necessary non-degree credentials?

    ○ Yes

    ○ No

11. If you answered "Yes" to the question above, please explain which occupations you have noticed a shortage due to credentialing.

Validation Step 2: Process to Convene Employer Focus Groups

At this point, your state has accomplished two major steps: 1) Using labor market data to preliminarily identify priority credentials within in-demand, high-skill, high-wage occupations; and 2) Surveying employers within those priority industries to systematically collect broad feedback from the field to refine that list of priority non-degree credentials.

Those two steps have provided your state with invaluable yet incomplete information. To close those gaps, you should convene focus groups of select employers to further test and validate the preliminary list. Those personal conversations will allow you to investigate any remaining questions your state has about individual credentials and to test the threshold your cross-sector team set (see previous instrument) to retain or remove credentials from your priority list.

In designing your focus group protocols, there are several important steps your state will need to take, each of which is described below.

I. Define clear objectives for each of your industry-specific focus groups.

Employers, like other professionals, are very busy. Requests for them to travel to and participate in non-degree credential focus groups pull them away from other important work at hand. Developing and sharing clear, relatable objectives with employers will convey the importance of this work for students and the future workforce.

While your state will likely have objectives unique to its own context, all states will seek to use focus groups to analyze employer survey feedback to make recommendations for final approval of an employer-endorsed non-degree credential priority list that includes credentials that are valued by employers in their talent sourcing work and helpful in recruiting new employees. There are also several more narrow objectives that will hold true across states:

- Resolve any concerns and/or inconsistencies found within employers' survey responses;
- Validate the threshold that was used by your state's cross-sector team to determine which credentials make the list and which are removed; and
- Vet each proposed credential (and identify others that should be considered if applicable) to confirm whether or not it's a part of your priority list.

II. Determine how many and which focus groups you will convene.

Examine your preliminary list of non-degree credentials to determine the focus groups you need. Organize them by industry, e.g., healthcare, information technology, and manufacturing. You may discover that you need more than one focus group per industry depending on the range of credentials on your list.

III. Identify employers by industry to participate in each focus group.

The composition of your focus groups, which should each be industry specific, will in large part determine the overall reliability of your priority non-degree credentials list. Participants will serve as both content and hiring experts who act as the final step in your quality assurance process. The following list describes important guidelines and/or considerations for your state in forming focus groups.

- Each focus group should consist of about 10 industry-specific professionals that represent each region of your state and a range of small and large, rural and urban businesses. You might invite up to 15 per focus group anticipating that some may not be available to attend.
- Employer participants should be familiar enough with the proposed credentials to weigh in on their value, both from a content perspective and a hiring perspective, i.e., they should be able to answer the question, "Does this credential represent the knowledge and skills needed for a good job in this industry?" Employer survey respondents, Chamber of Commerce members, local and state workforce board members, and those within industry associations often make good targets for participation.
- A state leader from K-12, postsecondary, and workforce development should be included within each focus group to gain understanding of employers' perspectives. In addition, you may want to include a professor/instructor in each group from an institution of higher education that offers credit and/or non-credit programs related to the proposed credentials who can offer input into the credential's value from a postsecondary credit and/or attainment perspective.

IV. Develop a thorough protocol for each focus group.

A sample follows that your state can adapt as needed. The protocol should script all the questions you intend to pose in each focus group as well as identify which materials will be distributed and when. Some key questions to consider during development include:

- **Who will lead the focus group discussion?** It should ideally be someone who understands the industry, is knowledgeable about the proposed credentials and how they fit within K-12 and higher education programs, and is a strong facilitator.

- **Which materials need to be developed and shared with the focus group?** Commonly used resources include the preliminary list of priority non-degree credentials; charts and graphs that represent the trends, alignment of responses, and disagreement within survey responses; a description of the threshold set by your cross-sector team to retain or remove credentials from the list; and a brief overview of the steps within the credential evaluation process.

V. Develop criteria for focus group participants to make final recommendations on which credentials make your priority list.

You want the focus group to make evidence-based decisions to the extent possible when making decisions about the value of the credentials. Some criteria that you may include are:

- The credential is relied upon by employers within recruitment, hiring, and promotion practices.
- Employees who have attained the credential earn higher salaries/compensation than those who have not.
- The credential provides opportunities for career advancement.
- The credential reliably represents that an employee has the prerequisite knowledge and skills for a job within the industry that pays a family-sustaining wage (according to the living wage calculator used in the first tool in this kit).
- The credential "stacks" with other in-field credentials to help employees progressively move up a career ladder.
- The credential is portable and is recognized by employers across the industry.

VI. Develop thresholds that your state cross-sector team will use to retain or remove credentials from the list based on employer feedback.

In all likelihood, your focus group participants will not unanimously agree on answers to the questions above. Your state team will need to agree on thresholds for keeping or removing credentials from the list. Some questions you might consider ahead of the focus group include:

- What proportion of focus group participants must agree with keeping any individual credential on the list? For example, do at least three-fourths need to advocate for a credential or oppose a credential?
- What process will the state team use to take that tally?

- What evidence/explanation is required to accept a focus group participant's nay vote?
- What evidence is required to accept a focus group participant's vote to add a new credential to the list? (Note, this will likely be the same threshold set in the first question on the previous page.)
- Do you plan to implement a weighted credentialing list to show which credentials have greater employment value than others? If so, what process and threshold will your team use to identify which credentials fall into various tiers?

VII. Consolidate final recommendations from the focus groups.

Following the completion of each focus group, your cross-sector team will need to review all recommendations. There may be discrepancies in the views of participants on the value of some credentials. In those cases, your team may need to undertake additional research prior to moving the recommendations forward. Once that has been done, your team will refine the list and move it through your state's established process for approval and publication.

VIII. Synthesize findings with survey results and vet any changes with your established process.

Once you have reviewed the findings from your focus groups, consolidate those findings with the results of your survey. Updates from the employer validation process should be tested against your established process to identify priority occupations and credentials to ensure that all changes are held to the same rigorous standards as your initial list. Once all changes have been vetted and incorporated, you will have produced your finalized list of priority non-degree credentials!

IX. Create a timeline to review and update your state's priority credentials list.

Like the economy your finalized list seeks to reflect, the process to identify and validate priority non-degree credentials is cyclical—not static. Your team will need to review and update this list to keep pace with a constantly changing economic landscape. Ideally, refreshing this process—from identification through validation—occurs every two or three years to ensure your list is reflective of current economic realities.

Sample Focus Group Protocol

To download a customizable version of this tool, visit http://edstrategy.org/resource/building-credential-currency/.

Introduction

Thank you for participating in today's focus group. Your feedback is very important, and we appreciate you taking the time to talk with us today.

{STATE TEAM NAME} has convened this group of workforce leaders because together you represent *{STATE}*'s priority *{INDUSTRY NAME}* occupations. It is in companies like yours that we find jobs that are not only the most demanded within *{STATE}*—they are also jobs that afford the greatest opportunity for employees in terms of skill level and associated wages.

Creating clear pathways to these jobs is a significant priority for our state, which is what brings us here today. *{STATE}* has identified a preliminary list of non-degree credentials that, based on our labor market data analysis and feedback from employers like you, are either required or strongly preferred for employment within the occupations you represent. Our job today is to validate that these non-degree credentials hold real value in employment decisions within your sector and confirm that *{STATE}* should prioritize and support the attainment of these credentials among potential employees.

At the same time, we recognize that hiring is a far more complicated undertaking than simply confirming whether applicants hold a certain credential. We hope to confirm that these non-degree credentials in combination with other standard hiring priorities—such as postsecondary degrees, technical skills, and professional readiness—indicate that a prospective candidate is right for a job within your industry.

The information you share in this focus group will not be attributed to you, so you should feel comfortable providing candid, honest, and straightforward responses to the questions posed.

Please remember that you received and signed a consent form to participate in this group, which means your participation is voluntary.

We'll try to keep our time here together to one hour. Are there any questions before we begin?

Focus Group Questions

First, let's get a sense for who is in the room. Let's quickly go around the room and get everyone's first name, company name, and region(s) of *{STATE}* in which your company operates.

{Quick round of introductions}

Great, thanks. Now, I'd like to discuss any critical needs and/or gaps you perceive within your business and field.

1. From your perspective, what are the most pressing current and future employment needs within the field?
    a. To your knowledge, are these also jobs that provide family-sustaining wages *{define}* and opportunities for advancement?

2. Do you feel that your businesses are able to successfully identify and hire the right talent from within *{STATE}*?
    a. If not, what is missing from the talent pool?
        i. Are potential workers not equipped with the right skills, training, or credentials? If so, could you elaborate on what those skills, training, or credentials are?
        ii. Are there not enough workers to meet demand for open positions?
    b. If yes, where do you find talent? For instance, do you have partnerships with colleges and universities (perhaps even high schools), industry associations, etc. that help you identify talent?

{Next, share with focus group members the draft list of priority non-degree credentials resulting from your state's labor market analysis and employer survey. At the same time, distribute any graphs or charts that your state team has made that represent the results of your survey analyses that highlight trends, alignment of responses, and disagreement within responses.}

3. We received helpful feedback from employers across the state regarding these non-degree credentials that we've tentatively identified as high-value. *{Share list of credentials.}*
    a. In your opinion and experience, are these non-degree credentials required or strongly preferred in order to secure employment or advance in these areas?
    b. Are these credentials portable? Do they hold value across the industry, regardless of business or specific job title?
    c. Are these credentials required/preferred in addition to a traditional 2- or 4-year college degree (or higher), or does the credential alone satisfy hiring needs?

d. Are these credentials stackable? Are there opportunities to become further specialized?

e. If these are credentials typically earned in workforce training programs or at the community college level, do you know of any "building block" credentials/exams that can help high school students better prepare for these opportunities? What are they?

4. Survey feedback from employers also revealed some inconsistencies that we would like to raise with you to get clarification.

{Draft and insert 2-3 questions here regarding concerning inconsistencies you found through the employer survey about particular non-degree credentials.}

{Review each credential relevant to that industry focus group and ask participants to vote on whether to retain or remove the credential from the list. Use the criteria you developed in preparation for focus groups (described in the previous tool) to make final determinations about each credential.}

5. Our *{STATE TEAM NAME}* reviewed the survey data and set a threshold of *{X}* to determine which credentials should remain or be removed from the priority list.

   a. Do you agree with that threshold value?

   b. Are there any credentials that were eliminated using that threshold that you think you should be added back into the list? Why?

   c. Are there any credentials that passed the "threshold test" that you feel are not essential to hiring and therefore should be removed? Why?

6. Are there any non-degree credentials on which you rely in your recruiting and hiring that do not appear on the list? What evidence exists to support their addition to the list?

Thank you very much for your time today. We appreciate your candid feedback that will help us finalize this list of priority non-degree credentials. Districts, institutions, and job training programs across the state will prioritize student attainment of these credentials to help more learners prepare for jobs that provide a solid career path with family-sustaining wages while also helping you as employers with your talent sourcing efforts.

{Conclude focus group.}

3. Incentivize Attainment of Priority Non-Degree Credentials

Case Study: Strategies to Incentivize, Communicate, & Report on Industry-Recognized Credential (IRC) Attainment

Florida's CAPE Policies and Practice

Once you have established your priority list of non-degree credentials, the next stage of this work is building energy among primary stakeholders—students, high school leaders and teachers, and higher education institutions—to make attainment a priority. In many instances, funding strategies provide the most direct and effective incentives. Whether its waived exam fees for students, bonuses for teachers who help students earn certifications, or additional funding for K-12 or postsecondary program budgets, funding is a "carrot" that appeals to a broad group of stakeholders—but it is not the only incentive strategy. Clear communication strategies can increase students' awareness and understanding of the value of non-degree credentials and encourage them to pursue these options. Articulation agreements boost the value of non-degree credentials by imbuing them with postsecondary value, in addition to labor market value. Even the accountability and reporting strategies outlined in the next section (Report) incentivize education leaders to direct attention—and perhaps resources—to the work of increasing credential attainment.

The first tool in this section provides a closer look at strategies to incentivize students, families, and K-12 education systems through a case study of Florida's long-established non-degree credential work. Subsequent tools in this section focus specifically on the variety of strategies states can take to incentivize K-12 and higher education systems.

The Florida Career and Professional Education (CAPE) Act was passed in 2007 to "provide a statewide planning partnership between the business and education communities in order to attract, expand, and retain high-value industry and sustain a strong, knowledge-based economy."[6] The legislation contains many activities to support this objective, including articulating non-degree credentials to postsecondary-level credit.

Articulated credit is nothing new: Many career programs and pathways across the country have established articulation agreements to award postsecondary credit for coursework completed in high school; and the prospect of reducing time—and cost—to a degree by earning early college credit is an incentive for many students and families. Florida, however, has taken the practice further by awarding articulated postsecondary credit for high-value credentials—in addition to career readiness coursework—and incentivizing attainment of both credentials and postsecondary degrees. Further still, Florida's policy acknowledges that not all credentials have the same value in the workplace. Through two tiered incentive structures—the articulation agreements themselves and school funding model—Florida prioritizes and rewards the attainment of its most valuable credentials.

This case study, organized around nine "key takeaways," highlights both best practices and potential challenges to consider for states interested in increasing and incentivizing credential attainment among students.

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6 Chapter 2007-216, Laws of Florida s. 1003.491, F.S.

Incentivizing and Communicating Credentials

1. Incentivize students and families by minimizing redundancy—and cost—of education with early postsecondary credit opportunities.

In the current economy, postsecondary education and training is essential for finding stable, family-sustaining employment: In the aftermath of the Great Recession, 99% of new jobs created went to workers with some level of postsecondary education—though, importantly, not all of the workers held bachelor degrees. Only 1% of new jobs went to workers with a high school diploma or less.[7] Despite these trends, college costs—and student debt—continue to rise. This new reality compels schools to create and expand opportunities for students to develop critically needed academic, technical, and professional skills in high school and earn postsecondary credit for that prior learning. Most students (and their families) simply do not have the luxury of waiting until college to earn college credit or of repeating coursework for skills they have already developed.

Establishing articulation agreements helps mitigate these financial and time costs; and credentials that carry currency in both the workforce and postsecondary institutions are doubly valuable for students. Florida has recognized this, creating articulated credential options in nearly every career cluster. The rigorous process to establish these agreements is described below.

IDENTIFYING PRIORITY NON-DEGREE CREDENTIALS

Before it can create articulation agreements for credentials, a state must first determine which credentials to prioritize. Florida does this through a formal application and review process. A workforce board or school district must formally submit a credential for inclusion on the Industry Certification Funding List. For each credential submitted, CareerSource Florida—the state's workforce development agency—reviews each credential's labor market value, working closely with the state's Department of Education and the Department of Economic Opportunity. Once a credential is approved by CareerSource Florida, it has satisfied one of three criteria for inclusion in the CAPE Industry Certification Funding List.*

**Note: Florida has a separate process for farm occupations. All farming credentials must be recommended by the state's Department of Agriculture and Consumer Services.*

7 Georgetown Center on Education and the Workforce. 2016. America's Divided Recovery. https://1gyhoq479ufd3yna29x7ubjn-wpengine.netdna-ssl.com/wp-content/uploads/Americas-Divided-Recovery-web.pdf

Florida's credential articulation process

Florida statute requires that all credentials on the Industry Certification Funding List be reviewed for potential postsecondary articulation. This process begins in the Florida Department of Education, with program specialists—individuals assigned to oversee one of 17 state-recognized career clusters and ensure program quality—who cross-reference a given credential's associated knowledge, skills, and abilities with the standards and competencies of related degree programs.

If significant overlap between a credential and degree program is identified, the process moves forward to representatives from the Florida College System. Within colleges that offer the related degree, discipline-specific faculty conduct an independent review of the credential's alignment to degree standards and competencies. If there is sufficient alignment, the faculty members propose the number of college credits the credential is worth and identify the specific courses to which the credential should articulate.

From the college system, the process moves to a negotiation between the Florida Department of Education and postsecondary partners to draft a formal articulation agreement. This agreement is then sent to a state-required articulation coordinating committee—consisting of representatives from Florida's university and college systems and school districts—for approval.

Upon committee approval, the final articulation agreement is sent to the State Board of Education for approval and adoption. Once adopted, the agreement is active until either the credential is removed from the Industry Certification Funding List or the degree program is closed.

From this process, Florida has established at least one articulated credential for more than half of its career clusters. As of May 2018, the list included over 120 agreements. While Florida's mission is to reduce students' time and spending toward a degree, the state nonetheless applies a critical lens to this work. Not every credential makes it through this process and articulates to college credit; and not every career cluster has a credential option that is relevant, rigorous, and valued enough to earn articulation.

As an added incentive to students and families, Florida has also instituted a scholarship program for students who earn credentials that generate at least five articulated credits (see Takeaway 3 for more information on credential value).

2. Incentivize schools and teachers prioritizing credential attainment with funding.

Students and families are not the only stakeholders for whom states should create credential attainment incentives. It is important to also provide clear signals to school leaders and instructors that offering students opportunities to earn high-value credentials is a priority for the state.

Florida communicates this priority through its school funding model. Each Industry Certification Funding List credential earned by students at the school generates supplemental funding in that school's budget. Additionally, Florida has established a bonus system for teachers who prioritize certification attainment in their classes. Credentials are also used as part of the college and career acceleration component of the school grading formula. See Takeaway 3 for the specific funding strategy Florida employs.

3. Not all credentials are created equal: Weigh incentives accordingly.

Points 1 and 2 lay the foundation for Florida's work to incentivize credential attainment, but what sets Florida apart is that both incentive structures—articulation and funding—signal that some credentials are worth more than others. While all credentials on Florida's Industry Certification Funding List have demonstrated *some* value (see the Identifying Non-Degree Credentials textbox on page 11), the actual value of individual credentials varies significantly. In both the articulation and funding processes, these differences are reflected in a tiered weighting system.

Among credentials that qualify for articulated credit, the amount of credit awarded is stratified: Credentials that are more difficult to earn and/or more valuable in the labor market carry more postsecondary credit than others. For instance, the FAA Aviation Mechanic—Airframe credential is worth 36.0 postsecondary credits through a statewide articulation agreement, while the Certified Phlebotomy Technician credential translates to just 1.0 credit.

Within both the school funding model and teacher bonus system, the weight of credentials is similarly stratified in accordance with its labor market value. Florida uses the amount of articulated credit each credential carries as a proxy for determining labor market value, as labor market analyses are already embedded into the articulation process. The school funding formula separates credentials into four tiers, using the amount of articulated credit as a proxy for labor market value:

- Credentials with no articulation are weighted at 0.1 FTE.
- Credentials articulating to 14 credits or less are weighted at 0.2 FTE.
- Credentials articulating to 15 to 29 credits are weighted at 0.5 FTE.
- Credentials articulating to 30 credits or more are weighted at 1.0 FTE.

The teacher bonus system reflects these tiers:[8]

- $25 for credentials with 0.1 FTE weight
- $50 for credentials with 0.2 FTE weight
- $100 for credentials with 0.5 or 1.0 FTE weight

Further, Florida removed its cap on teacher bonuses (originally $3,000 per teacher per year). If multiple teachers provided the direct instruction leading to student credential attainment, each teacher receives the bonus amount.

Varying credential value protects the fidelity of Florida's incentive system. In its initial system, the state weighted all credentials equally at 0.3 FTE. Such a system not only blurred the (often significant) differences in real labor market value of credentials, it also lacked any incentive for schools and teachers to prioritize more rigorous credentials. Despite the labor market value of credentials, each credential earned would generate the same amount of funding—and credentials with lower economic value are often easier for students to earn.

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8 Florida also has four "special innovation courses," which are weighted at 0.3 FTE. Teachers receive $75 for students who earn the embedded credentials in these courses.

Understandably, even in the stratified system, few students earn the highest-tiered credentials, due to the immense difficulty of those exams and rigor of additional requirements. The majority of credentials awarded in Florida's high schools fall in the second and third tiers (14 to 29 postsecondary credits per credential), and still make significant contributions toward an A.S. or A.A.S. degree.

4. Clearly communicate the benefits to students and families.

Florida legislation requires school districts to inform parents and students about the return on investment from these opportunities. This correspondence includes information on the number of postsecondary credits that can be earned by attaining a credential in high school, and the value of tuition saved in doing so.

In addition to communicating the return on investment credentials carry, Florida is currently working to enhance its advisement strategy. Determining the classes in which to offer credentials—and when students should participate—is an important consideration in Florida, as articulated credit is only guaranteed for three years after the student earns the credential. Students who earn credentials early in their high school careers or who do not enroll in college immediately after high school, for instance, may be ineligible to receive postsecondary credit for their work—though colleges could decide to honor the agreement past expiration at their discretion.

Advising around college and career options broadly is also being built out. Articulated credit is valuable when students pursue specific programs at specific schools. An FAA Aviation Mechanic credential is less valuable for a student pursuing a degree in history, for instance. Additionally, Florida's articulation agreements are established for A.S. and A.A.S. degree programs, which are typically comprised of older students. Many high school students who enroll in two-year degree programs pursue an A.A. degree as a stepping-stone toward a four-year degree, and may be unaware of the benefits to pursuing a more technical degree.

Sustaining the Work

5. Revisit and re-evaluate your past decisions.

Florida's process is continually developing. Looking forward toward the next phase of this work will be a process of looking back. Recognizing that the workforce is constantly evolving, credentials that have been reviewed for, but not granted, articulation will be revisited and re-evaluated for articulation. The process will still be guided by alignment of credentials to both in-demand occupations and degree programs; but adding in a re-evaluation schedule for previously rejected agreements acknowledges the fluidity of this process. Labor market demand changes as new occupations and industries emerge and as others fade. Postsecondary programs, too, change. New majors are added and others phased out, as do courses and standards within majors.

6. Consider your impact beyond K-12 students.

Florida's statewide articulation agreements for priority credentials benefit a wider audience than its K-12 population, as well. Anyone—student or adult—who has earned a credential that is articulated for postsecondary credit is eligible to claim articulated credit in partnering schools. Rather than focusing on the institution in which the credential was earned, Florida's

articulation agreements are concerned with the credential itself. This significantly widens the pool of individuals eligible for articulated credit, including military members who earn credentials during their service and students who pursue workforce training after high school before pursuing a college degree.

7. Generate buy-in from your partners.

Generating buy-in from the beginning—particularly among postsecondary partners—is crucial. The Florida Department of Education sought buy-in from its community and state college system in two ways: First, it engaged its accreditation body (SACS) in the process to ensure it was developing a process that protected program and institutional integrity. Additionally, the value proposition was reframed to appeal to postsecondary partners. Florida began by framing the work in terms of the value students gain—increased time and cost savings to encourage students to enroll in, and persist through, postsecondary education—rather than what an institution might lose in awarding credit for prior learning.

8. Document your process—and changes you make along the way.

Florida's process has been an iterative one, and the team at the Florida Department of Education credits clear documentation as key to sustainability. Since 2007, the processes to determine credentials' labor market value, establish articulated credit for credentials, and provide funding incentives has adapted. Documenting results of trial and error, updates to processes, and anomalies in the system is crucial for sustaining the work despite potential changes to personnel, policy, or priorities.

9. Codify the work in state legislation.

Prioritizing credential attainment within a state's larger workforce strategy requires institutional sustainability. Legislation is the gold standard solution by offering greater protection of the work over time and throughout political change.

Strategies to Design & Implement Funding Incentives

While identifying high-value, non-degree credentials is a critical first step in helping more students attain such credentials, states committed to advancing their attainment agenda should consider designing and adopting incentives to signal the importance of the work. Funding incentives in particular have proven to be an effective attainment driver in leading states.

They tend to fall into three broad categories:

1. Providing funding to cover the cost of credentialing examinations;
2. Awarding funds to schools and districts for each high-value credential earned; and
3. Providing merit-based bonuses to teachers of students who attain high-value credentials.

State Funding Incentive Examples

A number of states have tested funding incentives to grow non-degree credential attainment. Each may offer helpful lessons learned to states considering similar work. Brief descriptions of several of those incentives and links to additional information are provided below.

Covering credential examination costs

- **Virginia:** Each year, Virginia's General Assembly approves an allocation from lottery funds to cover the cost of industry certification exams, licensure tests, and occupational assessments that have been approved by the State Board of Education. Total allotment each year is calculated using a funding formula per student enrolled in CTE courses. Schools and CTE centers are eligible for these reimbursement funds, which are also used to support credentialing for teachers. In the most recent year, the funding formula was $2.95 per CTE student, which generated $1.8M in total allotment for the state.
- **Tennessee:** Education leaders in Tennessee have leveraged an option within the Carl D. Perkins Career and Technical Education Act that allows them to make grants available to Local Education Agencies (LEAs) for specific purposes to facilitate high-quality CTE. One of the grants LEAs may apply for is funding to offset the cost of exams tied to student capstone industry certifications as defined by the Department of Education (TDOE). TDOE caps the grant awards at $12k per LEA.
- **Louisiana:** The Louisiana Department of Education (LDOE) in 2014 formally recognized through the Career Development Fund that providing a high-quality CTE program like JumpStart costs more than traditional academic courses because of specialized equipment that must be purchased and credentialing and training that must take place. As a result, LDOE leverages both Perkins funding and the Career Development Fund (CDF) to cover the cost of exams for *statewide* industry-based credentials (i.e., not other

types of industry credentials) that are approved by the state's Workforce Investment Council. CDF provides an additional $238 to the per pupil funding formula per student (in addition to a basic 6% per student "adder") enrolled in a CTE course.

Awarding funds to schools and districts

- **Florida:** Undoubtedly, Florida has been a clear leader in the industry-recognized credential (IRC) space for a host of reasons, including financial incentives. Currently, Florida awards differentiated funding to schools based on the value and number of approved IRCs that students earn. Funds are generated based on a weighted full time equivalency (FTE) calculation ranging from 0.025 FTE for a basic digital tool certificate to 1.0 FTE for an advanced IRC that articulates to 30 or more college credits in specific degree programs at higher education institutions. Florida multiplies their basic per student allocation ($4204.02 in 2018-19) by a district cost of living differential and the FTE weight of the credential to arrive at a total dollar amount to be awarded per credential to each LEA in the state.

- **Kansas:** In 2012, Kansas passed SB 155 and founded the Excel in CTE Initiative that provides incentive dollars to LEAs based on the number of approved industry-recognized credentials earned by their students. Incentive funding was originally capped at $1.5M per year but has since been reduced by the legislature to $750k per year. The original legislation stipulated that local boards of education pay half the cost of a relevant credentialing exam per student, not to exceed $1k per exam, and not to exceed two attempts per student to pass the exam. Currently, per student amounts are capped at $450. In addition, students have until the end of December of their graduating year to pass an IRC exam.

- **Colorado:** Like Florida and Kansas, Colorado passed legislation with funding attached to spur students' attainment of IRCs. Currently, $2M is made available statewide through the Career Development Incentive Program. LEAs and charter schools are able to "earn" $1k per student who attains an approved IRC between July 1 and June 30 of the program year per state guidelines. To date, the number of qualified credentials earned has exceeded the funding available by a margin of 3:1. LEAs and charter schools must signal their intent to participate by the end of March each year and submit their reports of student IRC attainment by June 30.

Providing bonuses to teachers

- **Florida:** To further incentivize high-value IRC attainment, Florida has developed a merit-based bonus program for teachers based on the number of students who earn IRCs and the type of IRCs they earn. The program is directly tied to the FTE credentialing weights described above. Those middle and high school teachers who provide direct student instruction toward IRC attainment are eligible to receive financial bonuses ranging from $25 per 0.025 FTE credential to $100 per 1.0 FTE credential. In addition, Florida has recently removed the cap to this funding, so there is no longer a maximum dollar award that teachers can receive. However, they have issued clear guidance requirements as a step towards maintaining integrity in the process.

- **North Carolina:** The North Carolina General Assembly passed legislation to award bonus funding to CTE teachers of students who earn an approved industry-recognized credential. Total awards per teacher are capped at $3,500 per year. Individual teachers

accumulate bonus funding through a formula that awards $25 per "tier two" credential and $50 per "tier three" credential (and $0 per "tier one" credential), which have been classified according to employment value (entry wages, sector growth rate, and projected job openings) and academic rigor, both of which are explained further in the state's annual report.

While the examples described above are practiced exclusively within K-12, there are strong related practices emerging within higher education that states may consider as they design funding incentives for non-degree credentials. Rather than covering the cost of credentialing exams specifically or providing bonus funding to schools, higher education leaders in states have begun providing funding to spur enrollment within postsecondary programs that are offered in priority fields. Indiana and Ohio offer strong examples:

- **Indiana:** The Hoosier state has created Workforce Ready Grants for working-age adults that provide funding to cover tuition and mandatory fees for specific high-value certificate programs offered through approved higher education institutions. Eligible programs are those that culminate in postsecondary certificates that lead to jobs in the state's highest demand industries based on employer demand, wages, job placements, and program completion rates.
- **Ohio:** The Buckeye state now offers a Short-Term Certificate Program that provides needs-based financial aid to students who enroll in qualifying short-term (i.e., less than 12 months) postsecondary certificate programs that lead to an in-demand industry-recognized credential. In-demand fields are those that are aligned with occupations that pay a median hourly wage of $13.47.

Design Principles of Funding Incentives

Each type of financial incentive should be designed and implemented with substantial thought to anticipate both intended and unintended consequences. While state strategies across types of funding incentives will vary appropriately, there is one universal imperative to which states must be fully committed:

Ensure that your state has reliably identified non-degree credentials with labor market value and require that each financial incentive rewards attainment of only those credentials.

Any degree of "drift" away from this commitment could inadvertently encourage students to pursue credentials that do not lead to in-demand, high-skill, high-wage opportunities. And, given that many states are leveraging these incentives to help more students from underrepresented populations earn high-value credentials, it could also unintentionally steer those students down a dead-end career path.

In addition, states must ensure that high-value credentialing opportunities are widely available to all students. Barriers such as exam location and cost should be removed to the extent possible. Credentials should be attainable within a reasonable amount of time following course completion, and all necessary courses leading to the credential must be available to all students.

Design principles: Covering credential examination costs

Incentive objective: To expand student access to high-value non-degree credentials and remove financial barriers that often interfere with students' ability to attain those credentials.

Key considerations

- **For which priority non-degree credentials will your state cover exam fees?** Will it cover the cost of exams associated with any non-degree credential on its priority list? Will it cover only those that also count for postsecondary credit in a degree program? Those that are required for in-demand, high-skill, high-wage jobs (versus those that are "complimentary" to such jobs)? What criteria will your state use to decide on the credentials to be included in the policy?
- **How much of the exam fee will your state cover?** Will it cover the full cost of exams? Will it set a maximum dollar amount per exam? Will it award fixed-cost grants to LEAs to be used to cover exam fees, or will it use a funding formula that takes into account cost of living for each LEA to differentiate the per district amount it will cover?
- **What funding source will your state use to cover the cost of credentialing exams?** Will it use Perkins reserve funds? Does it have a lottery from which to pull funds? Will it request an annual appropriation from the General Assembly? Will it be driven through the per pupil funding formula?
- **For whom will your state making funding available?** Will funds only be available to LEAs? Will returning adult learners be eligible for exam fee reimbursement?
- **Which students will be eligible for credential funding?** Will your state fund more than one credentialing exam if students do not pass an exam on their first attempt? Will funding be available only if students have also completed the associated program of study or career pathway? How long do students have to take and pass an exam that is funded?
- **How will students, families, and educators know about the financial aid policy?** What communications outreach and resources will your state make available to help stakeholders learn about the opportunity?

Design principles: Awarding funds to schools and districts

Incentive objective: To increase student attainment of high-value, non-degree credentials through incentive funds to schools or districts that increase student access to high-quality career preparation programs.

Key considerations

- **Which priority non-degree credentials will your state "count" for incentive funds to schools and/or LEAs?** Will it count attainment of any non-degree credential on your priority list? Will it cover only those that also count for postsecondary credit in a degree program? Those that are required for in-demand, high-skill, high-wage jobs (versus those that are "complimentary" to such jobs)? What criteria will your state use to decide which credentials will be included in the policy?

TIP! If your state has included any "stepping stone" credentials on its list that don't themselves lead to good jobs, think twice about including them in financial incentives. Data in other states shows that students earn those complimentary credentials at much higher rates than higher-level credentials when given the option.

- **What dollar amount will be awarded per credential?** Has your state differentiated or "weighted" credentials on its priority list according to the employment value they offer? If so, will your state consider a corresponding differentiated structure in its funding awards to schools and/or LEAs?

TIP! Avoid creating a tiered funding system that allows lower value credentials to be bundled to create the impression of adding up to a higher value credential.

- **What is the maximum amount of funding that any one school or LEA is eligible to earn?** Beyond the differentiated per credential funding that your state may consider (in the second bullet above), will your state differentiate maximum award values to schools or LEAs that take into consideration the cost of living for a particular geographic area? Or will your state employ a uniform maximum funding value irrespective of the location of schools and LEAs?
- **In what ways can schools and districts spend the incentive dollars?** In what categories can funds be spent, e.g., supporting teacher training; improving facilities or equipment; purchasing materials; providing transportation for students? In what ways can the funds not be spent?
- **What funding source will your state use to award incentive funds to schools/LEAs?** Does it have a lottery from which to pull funding? Will it request an annual allocation from the General Assembly? Will it be driven through the per pupil funding formula?

- **How will educators learn about the bonuses?** What communications outreach and resources will your state make available to help stakeholders learn about the opportunity?
- **How will your state reliably collect and verify credential attainment data?** What reliable method will your state use to collect verifiable data (i.e., not self-report data) from LEAs in terms of the credentials that were earned and by which students? How will your state require concrete evidence of credential attainment?

TIP! Accepting self-report data from students regarding whether or not they passed the test is unreliable, especially when bonus dollars are at stake. States should put in place a more robust system that collects actual score reports and/or copies of credentials from credentialing vendors.

Design principles: Providing bonuses to teachers based on credential attainment

Incentive objective: To increase student attainment of high-value, non-degree credentials through incentive funds to teachers who provide relevant, direct instruction to students who earn those credentials.

Key considerations

- **For which priority non-degree credentials will your state award bonuses to teachers?** Will it count attainment of any non-degree credential on your priority list? Will it cover only those that also count for postsecondary credit in a degree program? Those that are required for in-demand, high-skill, high-wage jobs (versus those that are "complimentary" to such jobs)? What criteria will your state use to decide which credentials will be included in the policy?

TIP! If your state has included any "stepping stone" credentials on its list that don't themselves lead to good jobs, think twice about including them in teacher bonuses. Data in other states shows that students earn those stepping stone credentials at much higher rates than more valuable credentials when given the option. High-value credentials should be heavily incentivized.

- **What dollar amount will be awarded per credential?** Has your state differentiated or "weighted" credentials on its priority list according to the employment value they offer? If so, will your state consider a corresponding differentiated structure in its funding awards to teachers?
- **Which teachers or instructors are eligible to earn bonus funding?** Will the bonus funding be provided exclusively to K-12 teachers, or will other instructors/professors be eligible? Within K-12, will your state specify that the incentives are only aimed at CTE teachers, or will teachers of other academic areas be eligible? How will your state ensure that the teacher most responsible for helping students attain credentials is awarded the bonus?
- **What is the maximum amount of funding that any one teacher is eligible to earn?** Beyond the differentiated per credential funding that your state may consider (in the second bullet above), will your state differentiate maximum award values to teachers

that take into consideration the cost of living for a particular geographic area? Or will your state employ a uniform maximum funding value irrespective of the location in which the teacher is employed?

- **What quality assurance requirements will your state put in place to protect against "gaming"?** Will your state require that an impartial third party administer the exam? Must proctors also be present? Will students be permitted to retake the credentialing exam as many times as needed to pass, and will their teachers earn a bonus no matter how many attempts it took their students to pass? Will students who are unsuccessful on their first exam be required to wait a certain amount of time before retaking the credential exam (since they have already seen the exam questions)? How will your state verify that all rules and procedures have been followed with integrity?
- **How will educators learn about the bonus system?** What communications outreach and resources will your state make available to help stakeholders learn about the opportunity?
- **How will your state reliably collect and verify credential attainment data?** What reliable method will your state use to collect verifiable data (i.e., not self-report data) from LEAs in terms of the credentials that were earned and by which students? How will your state require concrete evidence of credential attainment?

Strategies to Design & Implement Attainment Incentives for Higher Education

Ensuring that students pursue and attain high-value, non-degree credentials is not a task for K-12 educators alone. In fact, the priority credentials identified by your team in Step 1 and validated by employers in Step 2 represent statewide priorities; and attainment of these credentials likely spans across K-12, higher education, and even employers themselves. This tool focuses on incentivizing your state's higher education community to prioritize high-value, non-degree credential attainment.

Incentives for higher education tend to fall into two categories:

1. Providing funding to cover student participation in programs culminating in priority non-degree credentials; and
2. Including the highest-value non-degree credentials in state postsecondary attainment goals.

Funding Incentives

A number of states provide funding to cover the cost of student participation in programs culminating in priority non-degree credentials. These funds are often needs-based and generally cover the full cost of a certificate or credentialing program, rather than covering the credential exam cost itself. While some states provide funds to higher education institutions to redistribute to students, others provide assistance directly to the students themselves.

Examples

- **Indiana:** Indiana's Workforce Ready Grant supports adults (aged 18 and over) pursuing high-value certificate programs at a variety of institutions. The grant covers tuition and mandatory fees associated with required coursework for certificate programs for up to two years. Support is limited to programs in five high-demand sectors: advanced manufacturing, building and construction, health sciences, IT and business services, and transportation and logistics. Programs may be credit-bearing or non-credit-bearing, though all are aligned to a certificate or credential necessary for jobs in these high-demand areas. Examples of supported programs include the CompTIA Security+ program at Hope Training Academy, the CNC Production Machinist program at Ivy Technical Community College, and Aviation Maintenance Technology programs at Vincennes University.
- **Maine:** Like Indiana, Maine's Competitive Skills Scholarship Program also incentivizes priority credential attainment by directly funding adult students who pursue related programs, though Maine specifically targets students who do not currently hold any marketable postsecondary degree and have a household income below 200% of the federal poverty level. The grant covers tuition and fees that are not covered by other financial aid, and can also be applied toward other necessary supports for adult students, including childcare, transportation, and remedial coursework. Awards can range up to

$6,000 per year for full-time students and up to $3,000 per year for part-time students. Total awards and funding amounts are allocated by county.

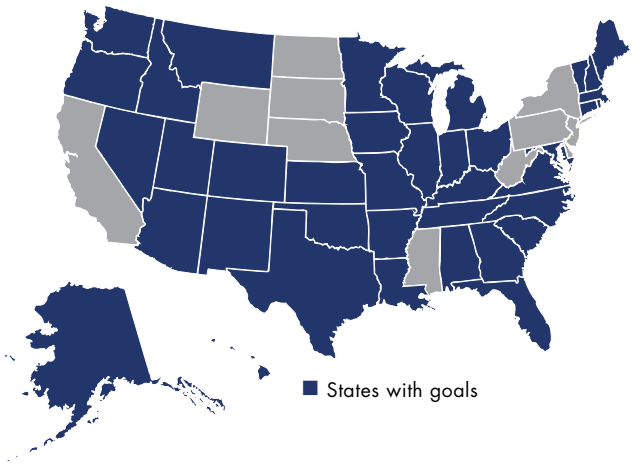
- **Ohio:** Rather than funding students directly, Ohio distributes funding for short-term certificate programs to higher education institutions, which may create need-based financial aid awards for students already enrolled in supported programs. This grant supports only programs with a duration of less than one year (30 semester hours or 900 clock hours) that culminate in credentials aligned to pre-determined in-demand jobs that pay at least $13.47 per hour (threshold set by OhioMeansJobs).

Postsecondary Attainment Goals

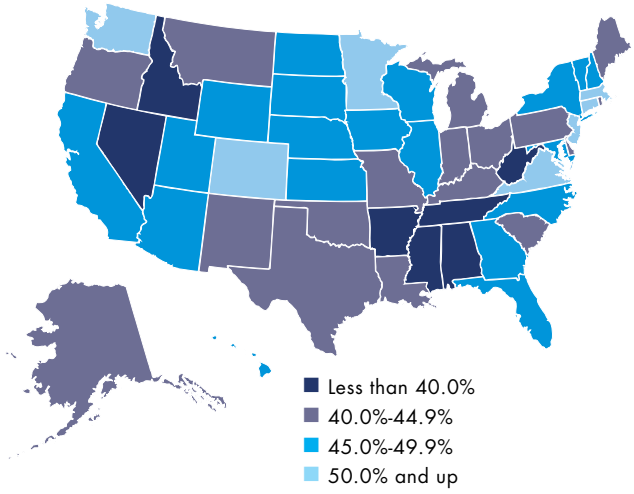
Higher education systems also have clear opportunity to take meaningful steps to encourage student attainment of high-value, non-degree credentials. As states begin to leverage their performance funding systems as an opportunity to increase degree completion and shorten students' time to degree, they might also include priority non-degree credentials within those systems as an additional strategy to meet their goal.

Incorporating the highest-value non-degree credentials into state's postsecondary attainment goals is another option to incentivize attainment at the postsecondary level. Currently, 42 states have set ambitious attainment goals to increase the number of adults with a postsecondary credential. With deep investment in promising strategies, states have begun to move the needle on reaching that goal, but every state has a ways to go.

States with Postsecondary Attainment Goals



Current Postsecondary Attainment Rate by State



While these goals are clear about including a variety of postsecondary degree types—from associate to master and professional degrees—few have incorporated parameters for including the non-degree credentials that are equally valuable in the labor market.

To this end, Education Strategy Group will be working with a select group of states through the Credentials of Value Institute to build potential decision rules and processes for incorporating non-degree credentials into statewide postsecondary attainment goals. Promising practices will be made available as an addendum to this toolkit in Spring 2020.

4. Report on Attainment of Priority Non-Degree Credentials

Process to Effectively Build Non-Degree Credentials into K-12 Data & Accountability Systems

In addition to funding, many states have prioritized and incentivized non-degree credential attainment at the K-12 level through accountability and reporting. Prior to ESSA, only 11 states included credential attainment in their high school accountability and reporting systems. Today, 26 states have included attainment of industry-recognized credentials in these systems.

To create strong and meaningful incentives within this framework, your state will want to make sure that it is collecting comprehensive, validated data; storing that information in the appropriate data systems; and creating processes in accountability and reporting to clearly prioritize only the non-degree credentials that are aligned to in-demand, high-skill, high-wage occupations. Use the checklist below to jumpstart a conversation with your state team about building—or refining—a process to include priority non-degree credentials in reporting and accountability efforts.

Collecting the Right Data

To establish a strong practice of monitoring and reporting on non-degree credential attainment, you will first need to confirm that your team is collecting the right information. Getting quality data on non-degree credentials is a challenge for many education systems across the country, but there are concrete components states can look for to ensure their data are robust and reliable.

Your state/districts will need data that are:

✔ Student-level.

Collecting credential data at the individual level will enable you to analyze disparities across student sub-groups and special populations to monitor equity in access and attainment and will better enable you to validate the data's accuracy.

✔ Validated or reported directly by a third party.

Self-reported information (either from student surveys or teacher reporting) is often the easiest way to collect credential attainment data—but it also leaves the door open for error.

The best way to ensure your state receives reliable data is through data sharing agreements with credentialing vendors. See the sample agreement, modeled after that one used by Tennessee, for guidance on how these agreements might be structured.

If data sharing agreements are not an option, the state systems can still take measures to ensure that it receives reliable information. Some states require districts or institutions to submit proof of attainment (often in the form of a copy of the credential) as part of an audit process. States may select a percentage of credentials (generally between 10% and 20%) or randomly select a small number of districts to validate credential data.

States may also consider creating and disseminating student-level reporting templates that incorporate all required fields of information, rather than allowing institutions to submit data in multiple formats or to varying degrees of specificity. If a single student information system is used across the state, these structured data fields could also be built into that system directly.

✔ Comprehensive of all test attempts—including failed attempts as well as passes.

It is often easier to collect information on students who pass credential exams than those who fail, but only collecting "pass" information paints an incomplete picture of credential attainment. What percent of test-takers pass credential exams? Are their disparities in participation and pass rates among various student sub-groups? Answering questions like these requires more comprehensive information than just a list of students who passed the credential exam.

✔ Detailed—including basic pieces of information like credential name and test date.

Ensuring quality requires knowing what is being measured. In any collection strategy, including credential name and test date is essential to both analyzing trends and validating information. If your state will require districts and schools to submit copies of certification as proof of attainment, critical information fields should still be included in your data system for easy look-up (as opposed to having the submitted file serve as the "data").

Storing Credential Data

Like other student information, credential data should be stored securely within the state's longitudinal data and/or student information system(s). To do this, your state will likely have to create customized fields to house student-level credential data and develop guidance and training for districts to safeguard data quality.

Your data system should include, at a minimum, the following fields:

✔ Credential name and code.

As most analyses will want to compare trends across credential types, states must be able to easily identify credentials within their data systems. The most effective way to do this is by assigning each credential a unique alpha-numeric code. Relying on state-determined alpha-numeric code ensures consistency across districts and schools, alleviates confusion at local levels, and enables easier crosswalks between credentials and the specific programs or courses in which they are offered.

✔ Test date.

Storing the test date is not only essential for validating data accuracy, but may be useful if your system stores information on multiple testing attempts. If a student sits for the same credential exam more than once, your state may want to collect that information but use only the most recent test in its reporting.

✔ Attempt result (pass or fail).

As noted above, having complete information about all credential exams attempted is essential for analyzing trends in participation, pass rates, etc.

✔ Related career pathway.

If credentials are earned as part of a career pathway or CTE program of study, including this information in your data storage system can help your state team identify the pathways and programs that offer opportunities for embedding aligned non-degree credentials and/or scaling student attainment of those credentials.

✔ (Recommended) Space to upload a file.

If your validation strategy includes states providing copies of credentials earned, storing those files in the same system may increase efficiency in access.

Ensuring Accuracy

To ensure that the information coming into your system from school- and district-level reporting is accurate, your state should also work to:

✔ Develop guidance for districts entering data into the student information system.

Your state should develop specific guidance for districts on using and navigating the new credential-related fields. Guidance should include a crosswalk between alpha-numeric codes and their assigned credential name, directions on how and where to upload copies of credentials earned (if including in your system), protocols for assigning multiple credential attempts to a student profile, directions on how to batch upload multiple records if your system supports the functionality, and contact information in the event of additional questions.

✔ Conduct training sessions for local data coordinators.

In addition to written guidance, your state should organize training sessions (either in-person training days and/or webinars) to orient local data coordinators to your reporting system and requirements. Training sessions should include a demonstration of the data entry process, tips for troubleshooting common errors, and ample time for questions from local attendees. If organizing training over webinars, consider recording the webinars and making the video available for individuals to refer back to later.

✔ Work with state and/or local student information system vendors to pre-populate fields.

Closed-choice fields—like the alpha-numeric codes assigned to each credential offered in your state—should be pre-populated in the system to reduce data entry errors. Pre-populated options should be reviewed regularly to ensure that all current options are available within the system and out-of-date field options are removed from the system.

Including Credential Data in Reporting and Accountability

Ultimately, the incentive to offer and scale attainment of priority non-degree credentials rests in how your state team embeds credentialing data into its reporting and accountability systems. Through public reporting and accountability—which may be further tied to funding decisions, statewide awards, or public recognition—states can signal to its institutions that the attainment of high-value non-degree credentials is a significant priority.

To do this, your state will need to determine:

✔ The level(s) of accountability in which credential attainment lives, including:

- ✔ School report cards and other public reporting
- ✔ Perkins accountability and reporting
- ✔ State accountability system
- ✔ Federal accountability system

✔ The process by which your reporting and/or accountability system(s) will distinguish priority non-degree credentials from lower-value opportunities.

This is a critical step that will require careful consideration. Accountability and reporting systems provide clear signals of priorities to districts and schools and incentivize stakeholders to measure and monitor those priorities. Setting a high bar by clearly distinguishing high-value credentials from the broader universe of credential options is imperative to protecting high expectations for all students.

To do this, your system(s) could choose to:

- ✔ **Limit reporting to only include the non-degree credentials that are aligned to in-demand, high-skill, high-wage occupations.** With this option, there is no need to distinguish priority non-degree credentials from other options, because your system only reports on and awards priority credentials.
- ✔ **Store and report data on all credentials to track high-value credential attainment against total credential attainment.** Even if your state does not want to include non-priority credentials in its accountability systems and decision-making, it may still be useful to track the attainment of all credentials. Realizing, for instance, that your state's overall credential attainment rate is much higher than

its priority credential attainment rate may be useful to direct best practices and opportunity areas for bolstering high-value attainment. If your state will collect data on all credentials, make sure your data system includes an indicator for whether the credential is on your state's priority list.

- **Weigh credentials differently based on their alignment to in-demand, high-skill, high-wage occupations.** If your state prefers to keep the full breadth of credentials in its reporting and accountability system(s), you may consider creating tiers for credential quality, whereby credentials closely aligned to in-demand, high-skill, high-wage occupations translate to more points than credentials unaligned to your state's priority occupations.

✔ The denominator your state will use in reporting credential attainment data.

How will your state frame credential attainment? Though there is no one "right" answer, the story your state will be able to tell depends significantly on the denominator chosen. Your state should be cognizant of what it wants to say about credential attainment and clearly communicate those parameters to readers.

Your state may choose a denominator from a number of options, including:

- Ninth grade cohort
- All graduating students
- All students enrolled in career pathways
- All CTE completers
- Only students who took in a credential exam
- Only students that passed a credential exam on the first attempt

Sample Data-Sharing MOU with Credentialing Exam Vendors[9]

To download a customizable version of this tool, visit http://edstrategy.org/resource/building-credential-currency/.

This Memorandum of Agreement ("MOA") is entered into by and between the *{PARTY NAME}* (*"PARTY NAME"*), hereinafter referred to as "*{PARTY NICKNAME}*" and the *{STATE}* Department of Education, with offices located at *{ADDRESS}*, hereinafter referred to as "*{STATE DEPARTMENT OF EDUCATION ABBREVIATION}*."

1. Project Overview and Statement of Work

Under the Family Educational Rights and Privacy Act ("FERPA") Section 99.31(a)(6)(i), *{PARTY NICKNAME}* agrees to disclose information to the "*{STATE DEPARTMENT OF EDUCATION ABBREVIATION}*" to provide information on student achievement of industry certifications.

{Description of the purpose behind the study and each party's responsibility}

It is the goal of the department that every student in *{STATE}* graduates high school prepared for postsecondary coursework and qualified for quality employment. To achieve this, high school students are encouraged to focus their elective credits on robust, career-aligned learning pathways. For students focusing in career and technical education ("CTE") through one of the programs of study in the 16 nationally recognized career clusters that the department promotes, robust learning pathways should culminate with the achievement of nationally recognized industry certifications, meaningful work- based learning experiences, and/or attainment of postsecondary credit hours through early postsecondary opportunities. As it pertains to industry certifications, all department-promoted certifications are aligned with postsecondary and employment opportunities and with the competencies and skills that students should have acquired through their chosen programs of study.

The purpose of this agreement is to share data about industry certification attainment and to be able to track how many students in *{STATE}* earn an industry certification upon high school graduation or immediately after high school graduation. It is the responsibility of the *{PARTY NICKNAME}* to send data to the *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}* about individuals who take and individuals who pass *{NAME OF INDUSTRY CERTIFICATION}* annually. This data is to be sent to the *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}* no later than September 1 of each year for the prior year information. It is the responsibility of the *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}* to match the data submitted from *{PARTY NICKNAME}* to the student information on file to determine how many students in *{STATE}* graduate with an industry certification.

9 This sample data sharing agreement is based on the agreements that the Tennessee Department of Education has in place with multiple credential vendors.

2. Definitions

Wherever used in the MOA, the following words and terms will have the respective meanings ascribed to them as follows:

2.1 "**Confidential Information**" means any personally identifiable student information including that derived from education records as determined under FERPA. Confidential data shall not include personally identifiable teacher evaluation data or student free and/or reduced price lunch status.

2.2 "**Reports**" means any reports developed by *{PARTY NICKNAME}* and accompanying materials. The types of reports and the data contained within these reports will be determined by the *{PARTY NICKNAME}* and *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}*.

2.3 "**Data**" means all information, records, files, and data used by the *{PARTY NICKNAME}* and provided to *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}*. Data may include individual level Confidential Information.

2.4 "**Third Party**" means any person or organization other than the *{PARTY NICKNAME}*.

2.5 "**Industry Certification**" refers to the certificate or credential issued by the *{PARTY NICKNAME}*.

2.6 "**Sat for**" refers to the individuals who actually took the certification exam as issued through the *{PARTY NICKNAME}*.

2.7 "**Passed**" refers to individuals who sat for and successfully completed the industry certification as issued through the *{PARTY NICKNAME}*.

2.8 "**CTE**" means Career and Technical Education.

2.9 "**Testing Site**" means the location at which an individual sat for the industry certification.

2.10 "**Testing Date**" refers to the date the individual sat for the industry certification.

2.11 "**Score/Certification Status**" refers to the result of the individual's performance on the industry certification.

3. Period of Performance

The Period of Performance of this MOA is January 21, 2016 to September 30, 2021 ("MOA End Date"). The MOA End Date may be extended only by mutual written agreement of the Parties.

4. Dates and Types of Data Requested

Data to be transferred pursuant to this agreement:

{Description of the data and data variable to be requested}

Industry certification attainment of individuals from September 2 to September 1 of the following year to be submitted annually on September 1.

Data submitted should include the following (if available):

- First name
- Middle name
- Last name
- Home address
- Home ZIP code
- Birth month
- Birth day
- Birth year
- Social Security (if available)
- School district (if available)
- Testing site (if available)
- Testing date (if available)
- Score/certification status

5. Data Agreement

The *{PARTY NICKNAME}* agrees to send confidential data to *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}*, and to observe the following security provisions when transferring and reporting data. These provisions set forth are subject to Federal and State confidentiality laws and ensure that the required confidentiality of personally identifiable information is always maintained.

Transfer

5.1 All data transfers will be encrypted with a minimum of 128 bits and uploaded to the *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}* secure server/Secure File Transfer Pathway (SFTP).

5.2 Additional modes of data transfer may be identified and requested over the duration of the MOA.

Outline of the Data Flow

5.3 A representative of the *{PARTY NICKNAME}* must sign this MOA along with the representative of the *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}*.

5.4 Data will be used ***only*** for analyses that respect privacy and confidentiality of all concerned parties including individuals, students, teachers, classrooms, schools, districts, intermediate school districts, and the State of *{STATE}*.

5.5 Data may ***only*** be used for the purposes of identifying how many *{STATE}* students earn an industry certification.

5.6 The handling of all data will, at all times, adhere to the Family Educational Rights and Privacy Act (FERPA).

6. Indemnification

6.1 The *{PARTY NICKNAME}*, to the extent not prohibited by law, will indemnify and hold harmless *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}* as well as its employees, agents, and representatives from and against any and all claims, liabilities, losses, and causes of action which may arise, accrue, or result to any person or entity which may be injured or damaged as a result of the *{PARTY NICKNAME}*'s gross negligence, willful misconduct, or any failure to comply with any provision of this MOA.

6.2 The *{PARTY NICKNAME}* or its representatives further agrees it shall be liable for the reasonable cost of attorneys for *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}* in the event such services is necessitated to enforce the terms of this MOA or otherwise enforce the obligations of the *{PARTY NICKNAME}* and its representatives to *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}*.

6.3 In the event of any such suit or claim, the *{PARTY NICKNAME}* or its representative shall give *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}* immediate notice thereof and shall provide all assistance required by *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}* in *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}*'s defense. *{STATE DEPARTMENT OF EDUCATION ABBREVIATION}* shall give the *{PARTY NICKNAME}* and its representative written notice of any such claim or suit, and the *{PARTY NICKNAME}* and its representative shall have the full right and obligation to conduct the *{PARTY NICKNAME}* or its representative's own defense thereof.

6.4 Nothing contained herein shall be deemed to accord to the *{PARTY NICKNAME}* or its representatives, through their attorney(s), the right to represent the State of *{STATE}* in any legal matter, such rights being governed by *{STATE}*'s *{CODE AND SECTION NUMBER}*.

{Party Signature(s)}

Name: _____

Title: _____

Signature: _____

Date: _____