New Skills for Youth (NSFY), launched by JPMorgan Chase & Co. in 2016, is a $75 million, five-year initiative aimed at strengthening and expanding high-quality career pathways for youth. As part of this initiative, the Council of Chief State School Officers, Advance CTE and Education Strategy Group worked with states to improve their career readiness systems.

NSFY consisted of two phases. During Phase One (March-October 2016), 24 states and Washington, D.C., conducted a career readiness needs assessment and developed action plans to expand the opportunities available to learners. In October 2016, these states presented their action plans to a panel of experts, who selected a cohort of 10 states — Delaware, Kentucky, Louisiana, Massachusetts, Nevada, Ohio, Oklahoma, Rhode Island, Tennessee and Wisconsin — to receive an additional $2 million to implement their plans over three years. During Phase Two (January 2017-December 2019), these 10 states worked to put their plans into action and bring about a transformation of their career readiness systems.
In 2014, three years after the U.S. Department of Education began offering states the opportunity to waive requirements of the Elementary and Secondary Education Act, 17 states were counting career readiness in their high school accountability systems, either directly through the accountability formula or through bonus points. Just five years later, that number has jumped to 40 states. Over this time, a significant paradigm shift has occurred. More and more states are recognizing that today’s learners need more options to explore and pursue pathways to tomorrow’s careers, and policymakers are taking concrete steps to strengthen and expand access to high-quality career pathways.

Many state leaders no longer question whether career-focused learning should be a core part of the high school experience but how. Between 2014 and 2018, state policymakers enacted roughly 800 policies related to Career Technical Education (CTE), work-based learning, industry-recognized credentials and career pathways. And in 2019, workforce development was one of the top education-related priorities mentioned by governors in their state of the state addresses. Furthermore, there is a groundswell of support from the public for more career-focused learning in high school. Nearly four out of five American adults say that schools should prepare students for both jobs and academics, reflecting a shift in perceptions about the purpose of secondary education.

Despite this paradigm shift, the skills gap between workforce demand and ready talent persists. A 2018 analysis found that in 12 career areas the demand for workers exceeded the supply, resulting in a total skills gap of 4.4 million job openings across the country. Closing this gap is an urgent need for state policymakers and educators. At the same time, too many learners exit the education system without the skills, abilities and experiences they need to access a high-wage, high-skill and in-demand career, perpetuating economic inequality in America and closing pathways to opportunity for those who need them the most. Meanwhile, employers are eager to find the talent they need to strengthen their bottom line.

To address the urgent need for strengthening career readiness among youth, the Council of Chief State School Officers convened a task force of state chiefs, State CTE Directors and key national partners in 2014. The group’s charge was to study promising state practices and develop recommendations for state leaders to transform career readiness and career education for each learner. Three key recommendations emerged from the task force:

- Enlist the employer community as a lead partner in defining the career pathways and skills most essential in today’s economy;
- Set a higher bar for the quality of career preparation programs, enabling all students to earn a meaningful postsecondary degree or credential; and
- Make career readiness matter to schools and students by prioritizing it in accountability systems.

These recommendations serve as a roadmap for states to transform and expand access to career pathways for youth.

To help accelerate state-driven efforts, JPMorgan Chase & Co. launched the New Skills for Youth (NSFY) initiative, a multi-year, multi-site global investment to prepare today’s youth for tomorrow’s careers. Through NSFY, 10 states — Delaware, Kentucky, Louisiana, Massachusetts, Nevada, Ohio, Oklahoma, Rhode Island, Tennessee and Wisconsin — were selected to...
build and implement an action plan to transform their career readiness systems. While many of the states already had in place some of the foundational elements for a cohesive career readiness system, the NSFY investment added fuel to the fire, giving states the freedom to pilot and test new strategies and scale innovative local practices.

This report documents how these states approached the task of transforming and expanding career pathways and the lessons they learned along the way. It explores how each of the 10 states took action to:

- Develop and scale high-quality career pathways;
- Expand access to work-based learning opportunities;
- Strengthen data and accountability to incentivize career readiness; and
- Lay the foundation for sustainability.

Perhaps the most consequential takeaway from the NSFY initiative is that state leaders have a critical role to play in catalyzing and scaling high-quality career pathways. The career readiness space is ripe for innovation and opportunity, and many of the most successful career pathways are driven by local employers, school leaders and postsecondary institutions with the determination and vision to help learners succeed. To ensure that these successes do not remain local “islands of excellence,” state leaders must learn from proven practices and create the enabling conditions for scale and success everywhere.

One fundamental responsibility for state leaders is setting a shared vision and agenda for career readiness. States are uniquely positioned to convene diverse stakeholders, align common goals across systems and service providers, and use the power of the bully pulpit to build awareness and buy-in among the public. Their leadership can bring about a complete transformation in the way education is designed and delivered.

States are also well positioned to catalyze and scale proven local practices. As new models, programs and strategies are incubated in communities across the country, state leaders can identify evidence-based practices and integrate them into guidance, professional development and other supports to ensure that local leaders can learn from and replicate them. States can also minimize duplication of effort at the local level by developing resources and making information available at scale. For example, states can publish state and regional labor market data, engage statewide employers in validating standards and vetting industry-recognized credentials and develop state-model career pathways.

Another critical role states play in transforming career readiness systems is ensuring equity and access for each learner. State leaders have a responsibility to educate each child, and they can use data and accountability, as well as state resources and supports, to identify and close equity gaps. This effort includes balancing the playing field for rural communities and removing systemic barriers that disproportionately affect learners by race, ethnicity, disability status, gender, socioeconomic status, etc.

One of the primary objectives of the NSFY initiative was to catalyze state-driven strategies and document promising practices that could be replicated in other states. As the NSFY initiative comes to a close, there are countless lessons and models to draw from across the 10 participating states. This report aims to document those lessons and provide a roadmap for others to strengthen and expand career pathways.
Developing and Scaling CAREER PATHWAYS

States have a clear role in developing and expanding access to high-quality career pathways. While each state could point to effective local models prior to the initiative, NSFY gave state leaders the opportunity to learn from the “islands of excellence” and set an expectation for quality statewide. The initiative also gave state leaders the opportunity to examine their own role in scaling high-quality career pathways and identify the right balance between state leadership and local implementation.

One of the key lessons from NSFY is that states can and should set the minimum expectations for quality career pathways by defining the non-negotiables and aligning policy accordingly. Outlining critical quality elements in a framework or rubric gives local leaders guidance and vision and allows state leaders to help them meet that bar.

Another critical lesson from NSFY is that states must ensure equity and access at the design stage and actively take steps to remove systemic barriers that prevent learners from accessing, succeeding in and feeling welcome in high-quality career pathways. During Phase One of the NSFY initiative, states conducted a wholesale evaluation of their enrollment and performance data to identify patterns of inequities across student subgroups. Based on this analysis, states worked to embed equity in program approval criteria, launch new grant funding to close equity gaps, deliver equity-focused professional development to school leaders and counselors and more. Grounding career pathways in equity ensures that each student can access the opportunities and success that high-quality career pathways provide.

Further, while local leaders implement and deliver career pathways, states can strengthen the quality and fidelity of these programs by providing technical assistance and professional development, fostering state and local partnerships and building awareness and buy-in. The advantage that states have is their scale. State leaders can tap into state and federal resources, identify and broker relationships with key players, and draw on the collective expertise and practices of the field. States also found success when they were willing to adapt. While states may have started with one plan of action, many ended up changing course in real time to respond to the needs of the field and provide stronger implementation supports to develop and scale high-quality career pathways.

Developing a Framework That Defines the Core Elements of a Career Pathway

What are the non-negotiable elements of a high-quality career pathway? For many of the NSFY states, answering this question was a critical — and not necessarily easy — first step. The NSFY states consulted industry partners, examined practices and policies in peer states, engaged leading districts and institutions, and collaborated with other agencies delivering education and workforce development to develop an agreed-upon framework for high-quality career pathways that could be used to guide program approval and implementation.

The specific guidelines and criteria states developed varied, but they can be synthesized into a few common themes. According to the frameworks, principles and criteria developed by the 10 NSFY states, to be considered “high quality,” career pathways should:

- Span the secondary and postsecondary education systems;
- Align to labor market needs in high-skill, high-wage, in-demand occupations;
- Offer focused career guidance and advisement;
- Blend rigorous and engaging core academic and career technical instruction;
- Include high-quality work-based learning experiences; and
- Culminate in postsecondary or industry-recognized credentials of value.
With these criteria in place, NSFY states began to set or align state policy to improve program quality. In Kentucky, for example, the Department of Education set new rules requiring schools and districts to only use state and federal funding to support career pathways that are aligned with priority industries or top occupations. Kentucky leveraged labor market data from the Kentucky Center for Statistics — the state entity responsible for collecting and distributing education and workforce data — to inventory, evaluate and justify the development and continuation of high-quality CTE pathways.

A challenge that many states face when aligning career pathways to top occupations is defining thresholds for wages, demand and skill within each occupation. The labor market is constantly changing, and states must ensure that learners are prepared not for the jobs of today but for the careers of tomorrow. Meeting this goal means examining labor market information at both the state and regional levels to determine the current and projected number of openings in a specific occupation, as well as data on the salary associated with those occupations.

**Ensuring Equity and Access by Design**

Several of the NSFY states embedded equity as a design principle for high-quality career pathways from the outset. For instance, when Massachusetts launched the high-quality college and career pathways (HQCCPs) designation process in 2017 to expand career preparation opportunities and align program offerings with industry priorities, state leaders included equitable access as one of five guiding principles.

The HQCCPs take two forms: Early College programs and Innovation Pathways. While both options allow students to earn postsecondary credit and engage in work-based learning, Early College programs focus on providing students with the opportunity to complete college-level academic coursework that articulates to postsecondary credit. Innovation Pathways focus on contextualizing student learning through experiential work-based learning opportunities that connect students to in-demand growth sectors in the regional economy. In addition to equitable access, the Early College and Innovation Pathways are guided by four other principles: guided academic pathways, enhanced student supports, connection to career and effective partnerships. Sites must demonstrate these principles to receive designation as an HQCCP.

To ensure that equitable access is a priority in the design of programs, candidate sites must demonstrate a commitment to equity and a plan to promote equitable outcomes. They can include evidence such as recruitment plans or strategies to remove bias from the admissions process.
Supporting Local Implementation

With the quality career pathways framework as a North Star, states need to be prepared to offer technical assistance, resources and supports to help local actors implement high-quality career pathways with fidelity. One approach that NSFY states used is issuing competitive planning and implementation grants to help start up new career pathways. Tennessee, for example, passed NSFY funds on to local districts through the Perkins Reserve Consolidated Grant, braiding funds with federal dollars to accelerate the implementation of career advisement, early postsecondary opportunities and postsecondary and employer partnerships.

Another common approach was designating regional coordinators to broker partnerships, coordinate activities, and provide technical assistance and training to support local career pathways. In 2018, Tennessee hired and trained nine regional coordinators to support the planning and delivery of high-quality career pathways in each of its nine regions. The coordinators serve as the main points of contact for K-12 schools, postsecondary institutions and industry leaders in their regions and are responsible for helping schools and districts apply for and receive career pathways certification. Coordinators also work with the regional directors from the Department of Economic and Community Development, the Department of Labor and Workforce Development, regional CTE consultants and local employers to identify priority labor market needs and align career pathways with high-skill, high-wage, in-demand opportunities. While the Board of Regents serves as the employer of record for career pathways coordinators, the coordinators are funded, managed and trained through the Department of Education, which ensures that the governance of the coordinators spans secondary and postsecondary education.

The Pathways Wisconsin initiative is supported by regional coordinators who work with employers, K-12 and postsecondary leaders and other key stakeholders to develop career pathways that are approved at the state level. Wisconsin piloted the program in four regions — Indianhead, Milwaukee, Madison and Moraine Park. With support and guidance from the four regional coordinators, the state has expanded regional career pathways to 63 school districts. To further support local implementation, the Wisconsin Department of Public Instruction created six professional development modules to help school district partners understand Pathways Wisconsin and support equity in career pathways.

Building Awareness and Gaining Buy-In

Communication is a key tool in translating policy to implementation and building support for change in practice and policy. Without a plan to raise awareness and gain buy-in, the best-intentioned state efforts can fall flat. States must build awareness around opportunities for learners; gain buy-in from key stakeholders such as school counselors, teachers, employers and families; and develop a structured communications strategy to coordinate these activities.

When Kentucky revised its program approval rules, state leaders anticipated that the shift toward labor market alignment could lead to pushback from the local level. To gain buy-in and inform local leaders about the intent behind the policy change, members of the Kentucky Department of Education met with school administrators across the commonwealth to discuss the need for labor market alignment in educational programs. Additionally, the Kentucky Department of Education provided technical assistance and hands-on guidance to local schools to help them transform their career pathways to meet standards for quality and labor market demand. As a result, Kentucky transformed and phased out virtually every career pathway that was not well aligned with labor market demand over the course of this initiative.

To support its approach to career planning through a new program called Individual Career and Academic Planning (ICAP), Oklahoma developed a web-based platform for students, families, educators and businesses to access information and resources. With different interfaces for different groups of users, the website, called Oklahoma Edge, serves as a “one-stop shop” for information on career pathways. The platform features tools for school-based staff such as ICAP resources and graphic guides detailing pathways to in-demand careers. Oklahoma Edge can facilitate connections between students and local employers, as well as serve as a professional learning community for educators. Separately, Oklahoma created a series of videos that leverage student stories to get the word out about career pathways. Through this comprehensive strategy, Oklahoma is communicating with stakeholders about career pathways opportunities and providing these stakeholders with the resources they need to play their role in Oklahoma’s career advisement system.
Leveraging Cross-Sector Partnerships

Developing high-quality career pathways that span secondary education, postsecondary education and workforce systems requires strong cross-sector partnerships. To establish lasting partnerships, states must ensure that all relevant stakeholders agree on a shared vision and goals, that policies and practices are aligned in a way that maximizes coordination and minimizes duplication of effort, and that different actors have clear roles to play in developing and delivering career pathways.

One lesson from the NSFY initiative is that executive leadership is critical to success. When the governor, chief state school officer and other state leaders elevate career readiness as a priority, it sends a strong signal to state staff and to actors in the field. Executive leaders can also use their positions to establish a shared vision and goals among cross-sector partners and align efforts to promote career pathways. Setting a foundation for collaboration empowers state leaders to more readily align and coordinate their work by braiding funding, aligning policies and programs, establishing joint metrics for accountability, and establishing routines for coordination and collaboration. Ultimately, these activities can remove duplication and ensure that learners can access the best services and education as they progress through their career pathways.

The Delaware Pathways team is one example of a cross-sector partnership that has garnered statewide commitment among public and private-sector partners to support career pathways. The team includes representatives of the Delaware Department of Education, Delaware Technical Community College (DelTech), the Delaware Department of Labor, the Rodel Foundation of Delaware, the United Way of Delaware, and the Delaware Workforce Development Board, which work together to carry out a strategic plan for delivering and expanding high-quality career pathways in the state. The strategic plan defines the roles of each partner, which are further articulated in a partnership agreement that lays out the goals, functions and routines across the team.

One of the routines that has contributed to the success of the partnership is conducting a regular “stocktake” meeting with key partners to assess progress and ensure that the team is on track to achieve its goals. From these meetings, the state develops annual memos to measure progress. This collaborative approach has contributed to the initiative’s early success. The number of youths participating in Delaware Pathways grew from 1,850 in the 2015-16 school year to 12,943 as of March 2019. By clearly defining the roles of each partner and establishing a method to measure progress, Delaware was able to use cross-sector partnerships to scale participation in Delaware Pathways.
Expanding Access to Work-Based LEARNING OPPORTUNITIES

Work-based learning — sustained interactions with industry professionals in authentic work settings — allows learners to develop the real-world skills they need to be successful in their careers. According to research from the Brookings Metropolitan Policy Program, participation in work-based learning experiences that allow students to learn from and develop relationships with industry professionals is associated with higher job quality later in life.\textsuperscript{10}

Much of the success of these programs comes down to the individuals and worksite supervisors who make them happen. Yet states can play an important — and even essential — role in creating the conditions for work-based learning to thrive.

One lesson from the NSFY initiative is that states have a responsibility to set the bar for high-quality work-based learning. Through NSFY, many states worked to identify and define the conditions for quality and to enact policy, develop standards and disseminate resources to help local leaders with implementation. An important condition for quality is that work-based learning experiences should be aligned with learners’ career pathways so that they reinforce and apply classroom learning.

Another strategy for expanding access to work-based learning opportunities is setting up and supporting intermediaries at the state, regional or local level to coordinate between employers and educators and broker opportunities for learners. Intermediaries can be non-profits, employer associations, or even school- or district-based staff. Whatever form they take, these entities play a powerful role in demystifying, strengthening and expanding high-quality experiences for youth in the regions they serve.

Finally, for work-based learning to truly happen at scale, state leaders need to focus on equity so that each learner who wants to can access and fully participate in these experiences. Barriers to access such as geography, transportation and workplace conditions can disproportionately affect certain populations of students, and states can and should take steps to identify and minimize these barriers. For rural learners, access to employers can be limited, but strategies such as simulated workplace and virtual employer engagement can close the distance. Likewise, states can support learners with disabilities by collaborating across education and vocational rehabilitation to leverage funds and coordinate services. Ensuring access and equity in work-based learning is a state responsibility, and state leaders should do everything in their power to minimize these barriers.

Defining and Ensuring High-Quality Work-Based Learning Implementation

A key lesson that emerged from NSFY was the role the state must play in defining the non-negotiable elements of high-quality work-based learning. In many states, the quality of learners’ experiences depends upon the local relationships between employers and schools, which leads to inconsistent experiences across a state. By establishing a statewide framework or model for work-based learning, state leaders can set the expectations for quality and to enact policy, develop standards and disseminate resources to help local leaders with implementation. An important condition for quality is that work-based learning experiences should be aligned with learners’ career pathways before progressing to more intensive career preparation activities, such as internships and pre-apprenticeships, in later grades. By developing a guiding framework, states can ensure that each of these experiences is aligned with content and learning in the classroom to support learners’ career pathways.

One advantage state leaders have is being able to engage employers with a statewide presence in the design phase of setting work-based learning standards. Employers can provide critical input into the specific skills and experiences learners need to obtain an in-demand career. Rhode Island, for example, involved employers from the beginning to validate standards for CTE programs and work-based learning. From 2017 to 2018, the Governor’s Workforce Board convened...
educators, employers and other stakeholders to develop new state work-based learning standards and guidance on implementing high-quality work-based learning. The Rhode Island Department of Education (RIDE) adopted the Governor’s Workforce Board standards and declared that high-quality work-based learning must be a component of any RIDE-approved CTE program. By intentionally engaging employers during the design phase, acting on the employers’ input and aligning program approval policy, Rhode Island was able to set the expectation for high-quality work-based learning across the state.

In states that do not have state-level standards for work-based learning, state leaders can still influence the quality of work-based learning opportunities by offering guidance and support for local implementation. The Ohio Department of Education (ODE) implemented a credit flexibility policy that permits school districts to award credit toward high school graduation requirements through CTE, work-based learning and other career-focused experiences. While this credit flexibility has existed since 2006, ODE, spurred by the state Legislature, released guidance in 2018 to help local school districts specifically award school credit to students who complete work-based learning. The guidance shows different ways learners can demonstrate subject-area competency through their placements, helping to ensure that learners’ experiences are appropriate for their specific career pathways.

Core to defining and ensuring quality work-based learning is measuring performance and using data to continuously improve practice. In addition to collecting descriptive work-based learning data, such as the number of hours worked or wages earned, states should collect data on student outcomes, such as skills gained, to assess impact. Collecting these data is often easier said than done. While many states, including Tennessee, Ohio and Oklahoma, have started using course codes to document intensive work-based learning experiences such as internships, cooperative education or youth apprenticeships, evaluating student competencies in a consistent way is much more challenging. One strategy is using a work-based learning plan or portfolio paired with an evaluation rubric completed by the worksite supervisor. However, this approach requires training supervisors and building the technology infrastructure to capture and analyze a complex set of metrics. While many of the NSFY states have started capturing work-based learning data, there is still time before this practice becomes established.

**Leveraging Intermediaries to Expand Access to Work-Based Learning Opportunities**

Operationalizing work-based learning statewide can be difficult for states in part because of limited capacity and resources to engage employers. To address this challenge, many states have turned to intermediaries, entities that support work-based learning or other career development activities for students and coordinate the relationships between educators and employers. States can play a role in supporting the existence of intermediaries through funding, building formal partnerships, or designating state-level organizations to serve as intermediaries.

For instance, the Rhode Island Governor’s Workforce Board selected Skills for Rhode Island’s Future, a non-profit that matches local businesses with qualified local job seekers, to serve as the statewide career readiness intermediary. As Rhode Island’s intermediary, the organization is responsible for engaging employers, setting up work-based learning opportunities and coordinating students’ placements. Skills for Rhode Island’s Future helped Rhode Island expand access to work-based learning opportunities by helping the Governor’s Workforce Board and RIDE set up the PrepareRI internship program, using its connections to establish work-based learning opportunities with leading employers in the state and taking on liability for students as the employer of record. Students are paid for the internship and earn college credit. Since implementing its partnership with Skills for Rhode Island’s Future, Rhode Island has increased the number of students participating in PrepareRI internships from 162 in 2018 to 326 in 2019.

Similarly, Delaware designated DelTech as a statewide intermediary to connect students with local employers at both the secondary and postsecondary levels. Through its partnership with DelTech, the state was able to develop a model to scale work-based learning coursework and employer engagement tools.
Advancing Equity in Work-Based Learning

Scaling work-based learning with intentionality means ensuring that each learner can access high-quality experiences and receive the supports he or she needs to feel welcome in and successfully complete work-based learning. Taking a “one-size-fits-all” approach to work-based learning may by default limit access by certain populations. States should consider and take steps to address barriers that may prevent historically marginalized populations from accessing meaningful opportunities. The physical location of work-based learning opportunities, lack of resources to support learners in need of accommodations, limited awareness of opportunities or climate of the workplace can be significant barriers to access and success. States can play a role in advancing equity in work-based learning by securing the appropriate resources and developing and scaling programs to meet the needs of specific populations.

Recognizing that states’ approaches to work-based learning opportunities can exclude historically marginalized populations, some of the selected NSFY states piloted work-based learning programs tailored specifically to meet the needs of students with disabilities. For instance, Louisiana piloted the Building Employment Skills for Tomorrow program in Bossier Parish in 2018 to connect learners with disabilities to work-based learning opportunities, equip them with real-world skills through training, and provide mentorship to program participants. Delaware, drawing on the National Alliance for Partnerships in Equity’s PIPEline to Career Success framework for gender equity, developed a two-year framework for districts to address challenges for students with disabilities. The framework includes integrated supports from the Delaware Department of Education, Delaware Department of Labor, and Delaware Health and Social Services. Through NSFY, Delaware launched PIPEline as a local pilot in three districts. Such pilot programs allow states to establish how to meet the needs of historically marginalized populations before scaling the promising practices learned through the pilots statewide.
Strengthening Accountability Systems to Incentivize Learners’ Career Readiness

One of the most powerful levers to incentivize career readiness is data and accountability. What gets measured matters, and if schools and districts know they will be held accountable for the number of learners who complete a career pathway, finish a work-based learning experience or earn an industry-recognized credential, they will prioritize those opportunities. Accountability systems are powerful because they promote public transparency, shed light on disparities, and illuminate where local districts and schools need to focus their efforts. They can also empower learners and families to make informed choices and give state policymakers actionable information to target investments of resources and technical assistance.

Several of the NSFY states began the initiative having already incorporated career readiness indicators into their state or federal accountability systems. These states had the advantage of being able to learn from and build upon their existing accountability systems. Other states drew inspiration from their cohort, defining new measures of career readiness for high school students. Now, all of the NSFY states include a career readiness indicator in their state or federal accountability systems or report cards (see Figure 1).

One of the critical lessons learned through NSFY is the importance of clearly defining and constructing career readiness indicators. Work-based learning, credential examinations and dual enrollment often take place outside of the classroom, which makes collecting data in a consistent way challenging. And depending on how measures are constructed, they can occasionally create perverse incentives. For instance, states should not count industry-recognized credential attainment without first specifying which credentials count and why they count to prevent the proliferation of low-level credentials.

With thoughtful design and implementation, accountability can be a lever for transformation, signaling that career-focused learning opportunities should be a core part of the high school experience. Historically, accountability for career readiness has been a responsibility of state CTE systems through the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV). The NSFY states, however, succeeded in expanding responsibility for career readiness to the broader educational system, encouraging schools, districts and local leaders to put more skin in the game.

Figure 1: How NSFY States Are Measuring Career Readiness

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Constructing a Meaningful Career Readiness Indicator

Data and accountability systems serve to inform the public, hold local educational institutions accountable for learner success, and help state leaders target resources to where they are needed the most. But depending on how career readiness indicators are designed, they can easily misrepresent the readiness and achievement of learners. As more states begin to collect and report career readiness data, some for the first time, there are some steps they can take to ensure that their accountability system is actionable and motivating the right types of behaviors.

For one, states should consider how their career readiness measures are weighted in the accountability system and monitor implementation to ensure that it does not create perverse incentives. Louisiana was one of the first states to include a measure of career readiness in its accountability system.
system. Since 2014, Louisiana’s Graduation Index has awarded schools and districts equal accountability points for equivalent levels of academic or career readiness accomplishments, such as earning a passing score on an Advanced Placement exam or earning an industry-based credential. Since then, the number of industry-based credentials earned in Louisiana has tripled, reaching 90,000 in the 2017-18 school year. However, fewer than 2 percent of credentials earned in the 2017-18 school year were in high-demand occupations, largely due to the way different types of credentials were weighted in the indicator. To address this challenge, Louisiana is restructuring its accountability system to better incentivize the more valuable — and harder to earn — industry-based credentials.

Secondly, states should share disaggregated data on student performance to demonstrate the myriad ways students can achieve career readiness. Each of the NSFY states with career readiness indicators selected a meta-indicator that includes multiple opportunities for learners to demonstrate preparedness, such as completing a CTE program of study, completing a work-based learning experience or earning an industry-recognized credential. Meta-indicators recognize that there are multiple pathways to college and career readiness, but they can also mask information about what specific paths students are taking. As such, several NSFY states also committed to breaking these meta-indicators into their constituent parts and reporting each metric to provide more clarity about student performance. Ohio’s school report cards, for instance, include a summative score for the Career & Postsecondary Readiness indicator but also break down how learners achieved readiness by reporting the percentage of learners that earned industry-recognized credentials, completed dual enrollment, completed a pre-apprenticeship and more.

Finally, states should consider how indicators of career readiness, such as participation in and completion of dual enrollment, industry-recognized credentials and work-based learning experiences, align to the student’s career pathway. To incentivize completion of dual credit opportunities, Kentucky integrated dual credit into the state accountability system through the Transition Readiness indicator. To cut down on what state leaders call “random acts of dual credit,” the Kentucky Department of Education has issued guidance specifying that CTE dual credit courses must be approved by the commonwealth, aligned to secondary CTE course standards, and within the learner’s career pathway to be included in the accountability system.

Centralizing Data Collection

Another way that states can improve data and accountability is by integrating career readiness data into a centralized statewide student information system. This integration not only makes collecting and reporting career readiness measures easier, but it also breaks down silos between agencies and ensures that state policymakers can more readily access information about student participation and success in career pathways. In 2017, the Wisconsin Legislature passed Act 59, directing the Department of Public Instruction to collect and report specific measures of career readiness in state report cards. To accomplish this, the department began to integrate career readiness data into its statewide student information system, called WISEdash. Previously, only districts that received funds under Perkins IV reported data to the department, and they reported only on CTE concentrators. However, all districts participate in WISEdash, greatly expanding access to and understanding of student participation and outcomes for these particular career readiness indicators. Additionally, as the state designed and expanded the Pathways Wisconsin initiative, state leaders built a flag in the data collection to facilitate future data collection and reporting of learners enrolling in and completing career pathways. By establishing clear measures of career readiness and integrating them into the statewide data collection system, Wisconsin is able to obtain the data it needs to inform its college and career readiness initiatives.
Throughout NSFY, states remained focused on creating sustainable conditions for long-term success. One way for state leaders to lay the foundation for sustainability is by working to establish a vision and bring together diverse stakeholders in support of a common goal. A number of states leveraged existing goals — such as a postsecondary credential attainment goal — to provide direction and clarity to their agencies and align different programs, services and stakeholders.

With a strong vision in place, state leaders can work to establish a policy infrastructure that reinforces and supports local career pathways. Setting practice to policy through legislation, executive orders and regulations can give the education and workforce development systems the support needed to sustain their efforts and withstand changes in leadership. In the NSFY cohort, some states started with flagship policy initiatives that served to orient their work. Others focused on piloting smaller-scale projects to build a proof of concept before taking them to policymakers. In either case, gaining buy-in and support from legislators, governors and state boards of education is a critical strategy to ensure long-term sustainability.

Importantly, funding through the NSFY initiative gave states a low-stakes environment to pilot new models and programs. While many of the ideas conceived at the outset changed shape over the course of the initiative, NSFY permitted a degree of flexibility for ideation and iteration. As the initiative comes to a close, states now have tested models that they can use to build a case for using taxpayer dollars to sustain career readiness efforts, and many have successfully identified federal and state resources to build upon this work.

Aligning State Efforts Around a Shared Vision

High-quality career pathways are connected and coordinated across the secondary, postsecondary and workforce systems to ensure that learners can transition easily along each step. Successful systems alignment distributes ownership across program areas and funding streams to support a shared goal, minimize duplication of effort, and remove barriers to entry and success for learners. This work ensures that learners have a clear path from their education to the workforce.

One of the keys to success for the NSFY states was having an executive champion, such as a governor or chief state school officer, to set the vision and help break down silos. Sometimes a champion at the top is needed to create the will and urgency for collaboration. An executive champion can facilitate a cross-sector shared vision, align agencies’ efforts to that vision, and convene stakeholders to establish routines and processes across agencies to promote systems alignment and operationalize support for high-quality career pathways.

Early in NSFY, Tennessee recognized that fragmentation of education, workforce and economic development regions and service delivery was a barrier to the success of Drive to 55, the state’s shared postsecondary credential attainment goal. To address this barrier, former Gov. Bill Haslam directed the Department of Education, Department of Labor and Workforce Development, and Department of Economic and Community Development to work together to align their service delivery regions and improve coordination. As a result, the three departments established nine coordinated regions across the state. This approach, which was facilitated by a shared commitment to the Drive to 55 campaign, allowed the Tennessee NSFY team to better coordinate with the Department of Labor and Workforce Development and the Department of Economic and Community Development to work together to align their service delivery regions and improve coordination. As a result, the three departments established nine coordinated regions across the state. This approach, which was facilitated by a shared commitment to the Drive to 55 campaign, allowed the Tennessee NSFY team to better coordinate with the Department of Labor and Workforce Development and the Department of Economic and Community Development to implement high-quality career pathways aligned to the needs of each region.
Codifying Practices Into Policy

A challenge that many states face is maintaining momentum for their vision when leadership changes. New governors and legislatures can shift priorities for career readiness in states, jeopardizing the work. To promote the longevity of their efforts, state leaders can build a strong policy infrastructure by codifying promising practices into policy.

In Nevada, for example, former Gov. Brian Sandoval had already set a vision for a “New Nevada” economy and developed a statewide strategic plan through the newly established Office of Workforce Innovation (OWINN). This foundation positioned Nevada to hit the ground running and leverage NSFY to enact a broad policy agenda early on.

In 2017, Nevada, with support from the Nevada Department of Education, the governor and the Legislature, enacted six major policies to lay the foundation for a statewide career readiness system. Laying the foundation included leveraging policies to strengthen work-based learning experiences, expand dual credit course delivery and agreements between secondary and postsecondary education agencies and formalize OWINN.

Securing Sustainable Funding

Central to sustaining career readiness initiatives is securing continuous funding that extends beyond the lifecycle of NSFY. States have a responsibility to ensure that local leaders have sufficient resources to expand access to high-quality career pathways. To create the conditions for long-term success, state leaders can maximize state, federal and philanthropic dollars by coordinating and aligning funding streams and drawing on evidence-based practices to build a case for additional resources from state policymakers.

One approach that states can use to secure sustainable funding is to braid funds across different program areas that have similar goals, which can allow the initiative to continue if one of the sources of funding dwindles or ends. To encourage the braiding of funds, states can leverage their position as conveners to gather partners to support their shared vision for career readiness and gain buy-in for the alignment of resources. For instance, Delaware braided funding across state, federal and philanthropic sources — including NSFY, Bloomberg Philanthropies, Perkins IV, funds issued under the Workforce Innovation and Opportunity Act Title I and local sources — to implement the Delaware Pathways strategic plan.

Another approach to sustain funds is to build and leverage an evidence base to secure funding in the state’s budget. Through advocacy by the governor, his Workforce Skills Cabinet, and the Executive Office of Education, Massachusetts secured a line item in its state budget to support HQCCPs once NSFY funding ends. In its FY 2020 budget, Massachusetts appropriated $2.5 million to support the development and implementation of Early College programs, a $700,000 increase from the previous year.

In addition, Massachusetts has collaborated with multiple philanthropic organizations, including the Smith Family Foundation and American Student Assistance, to support planning and implementation grants and has embedded HQCCPs in its Strengthening Career and Technical Education for the 21st Century Act (Perkins V) plan.

Similarly, Wisconsin invested NSFY funds to pilot Pathways Wisconsin, the state’s initiative to expand career pathways, in four regions and commissioned a third-party evaluator to assess the impact of the pilot. The state hopes to leverage the assessment of the pilot to justify securing funds in the state’s next biennial budget to scale Pathways Wisconsin to all regions. Regardless of what the state Legislature does, Wisconsin has embedded “state-endorsed regional career pathways” throughout its Perkins V state plan.
Key Lessons FROM NSFY

NSFY provided states with an opportunity to critically assess and transform their career readiness systems. The initiative allowed states to pilot, scale and cement new strategies to strengthen and expand opportunities for learners, surfacing lessons and practices that can be instructive to other states. Perhaps the most important lesson from NSFY, though, is the importance of state leadership in catalyzing and transforming career readiness opportunities for youth. State leaders are uniquely positioned to identify effective local practices, provide supports and guidance at scale, and create the conditions for equity and long-term sustainability. They must work in partnership with local innovators while simultaneously setting an expectation for quality statewide.

The challenges, successes and lessons of the NSFY initiative illustrate the importance of a strong state presence in strengthening and expanding access to high-quality career pathways. In particular, state leaders can:

- **Set a vision for career readiness.** State leaders can coalesce diverse stakeholders across agencies, regions and interests around a shared vision for career readiness. The NSFY states that made the most progress in the initiative were those with strong advocacy and support from executive leadership, including governors and chief state school officers. These leaders — alongside state-level postsecondary and workforce development leaders — played a critical role in operationalizing systems alignment and helping to codify practices into policy.

- **Catalyze and scale career pathways and work-based learning.** State leaders play an important role in setting the bar for effective policy and practice. They are well positioned to catalyze and scale locally driven career readiness efforts by identifying local exemplars and documenting promising practices that can be replicated in other areas. States can convene stakeholders, including business and industry leaders, to identify the non-negotiable elements of a high-quality career pathway or work-based learning experience and create a framework to guide local implementation. Once the state has a clear framework for career pathways, state leaders can leverage their positions as policymakers and conveners to secure the resources and partnerships needed to make this vision a reality.

  Additionally, states are positioned to develop and deliver information and resources at scale to minimize duplication of effort and support high-quality local implementation. This work includes leveraging labor market information and performance data to inform the development of career pathways and using accountability systems to incentivize career readiness and provide supports to local institutions.

- **Ensure equity and access.** When developing career pathways, states should ensure that they meet the needs of each student and support effective and equitable transitions. Meeting this goal means embedding equity as a design principle for career pathways from the beginning and ensuring that career pathways are designed and delivered using an equity lens. Furthermore, equity and access should be core to any state’s vision and agenda for career readiness. To promote equity, states should use data to identify disparities in participation and performance by race, ethnicity, gender, disability, socioeconomic status, geographic locale, etc. and target resources to close gaps. States should avoid taking a “one-size-fits-all” approach to career pathways and actively pilot and scale programs to meet the specific needs of historically marginalized populations.

In a period when state leaders have increasingly prioritized and encouraged career readiness opportunities for youth, the NSFY initiative provided critical resources to help leading states accelerate their efforts. The strategies they tested and lessons they learned through the initiative provide a roadmap for peer states aiming to transform their career readiness systems by improving the quality of their career pathways and expanding access to opportunity.
Methodology

The information in this report comes from a variety of resources including, but not limited to, state progress reports, state coaching calls, press releases, interviews, NSFY Phase One Snapshots, NSFY 2017 Phase Two Snapshots, and NSFY 2018 Phase Two Snapshots.

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Endnotes


8. Ibid.


14. Ibid.

15. Ibid.

New Skills for Youth