

## MEMORANDUM

*To:* Maine Department of Education, Maine Department of Labor, Maine Community College System, University of Maine System  
*From:* National Governors Association Center for Best Practices  
*Re:* Career Academy Implementation  
*Date:* December 2024

### SUMMARY

This memo has been prepared at the request of the Maine Department of Education, Maine Department of Labor, Maine Community College System, and the University of Maine System to provide information regarding implementation of a career academy model. This memo features an overview of the career academy model; NGA's analysis of state career academy programs; case studies of three states' career academies and additional state examples.

### CAREER ACADEMY MODEL

The career academy model has become ingrained in state education and workforce development systems across the country. The U.S. Department of Education also recognizes the opportunity that career academies can provide by including each element of the model, as discussed below, in "[The Keys of Unlocking Career Success](#)." Career academies generally have similar baseline characteristics across states. First, students enroll in a career academy pathway that is designed around an in-demand sector in the state and aligns with the student's interests and career aspirations. Second, students complete academic and career preparation coursework that is designed to satisfy multiple secondary and postsecondary educational requirements. Third, local employers and the workforce development system provide students with relevant work-based learning and career exploration opportunities. Throughout each stage of the career academy program, students receive career navigation and advising support. These elements are intended to provide students with a more hands-on, career-connected education and prepare them to enter the local job market with the skills and competencies employers need.

### IMPLEMENTATION ANALYSIS AND KEY TAKEAWAYS

NGA's analysis of states that have successfully implemented a career academy program has surfaced several key themes and takeaways that Maine may consider in developing and implementing its own model.

*Alignment across education and workforce development systems is critical.*

Buy-in from the leadership of the state's education and workforce development systems is critical for successful implementation. Career academies require strategic alignment and investment of time and resources by secondary education, postsecondary education and workforce development partners. States that have launched successful career academies have overlaid the model on top of existing education and workforce development programs, such as career and technical education (CTE) and career or college preparatory programs. By leveraging existing programs to stand up and administer career academies, states are able to conserve resources and avoid confusion or resistance to new programs and systems.

*The state Department of Education is the most common administrator.*

A majority of the states analyzed house the administration of career academies within their Department of Education, allowing the state to align existing educational standards and programs in secondary schools to the career academy model. A state's Department of Education is also often best situated to provide technical assistance to school districts (including administrators, teachers and support staff) who are implementing the career academy model at the local level, through educational webinars, workshops, learning communities, office hours, peer ambassadors and communities of practice.

*The workforce development system guides employer engagement.*

The workforce development system at both the state and local levels is generally responsible for analyzing the state's workforce and economic landscape to provide guidance on which in-demand sectors or occupations should be included in career academies. State and local workforce development partners also lead employer engagement to inform curriculum development and provide work-based learning opportunities to program participants. Several states have relied on local workforce development boards to serve as the main liaison between school districts and employers. Many states also focused on sector-specific employer engagement early in the development of each career academy to ensure broad public and private buy-in.

*Postsecondary connection is necessary for student success*

A core tenant of the career academy model is the ability for students to receive postsecondary educational credit as a part of the program. Across states, postsecondary institutions were involved in the design process to ensure programs were setting students up for success, whether their next step was into the workforce or to a postsecondary program. Offering postsecondary credit also expands the number of students who might be interested in a career academy, as it provides another route into higher education, rather than being a disconnected program. States also took care to maintain partnerships with a variety of postsecondary institutions including, technical colleges, community colleges and 4-year institutions, which allows the state to offer career academies in a variety of career fields and disciplines.

*Starting small and scaling up can ensure sustainable growth.*

Some states piloted the career academy model for a small set of key sectors that are important to the state's economy and attractive to students before expanding to additional industries. States also launched the career academy model in a few select school districts before expanding statewide or provide toolkits to school districts to implement programs through models approved by the state as they are applicable to their districts. These approaches allowed the state to adjust the model to simplify implementation for schools and increase engagement from students and employer before investing additional resources to expand the initiative. Funding for these pilots came through state allocations of the federal Strengthening Career and Technical Education for the 21st Century Act (Perkins V) as well as philanthropic and private employer grants.

*State and federal funding helps to increase capacity.*

Several states have offered funding to school districts for academy development and expansion, including state-funded grants and encouraging the use of federal formula funding through the Perkins V program and the Workforce Innovation and Opportunity Act (WIOA) Title I. U.S. Departments of Labor and of Education have also recently funded career academy programs through competitive grants such as the [Strengthening Community Colleges Training Grants](#) program and the [Perkins Innovation and Modernization Grant](#) program. The state-funded grants have allowed schools to increase faculty capacity, develop curriculum, provide work-based learning opportunities and cover expenses for dual enrollment courses. The federal program funding helped schools with costs related to curriculum, instructors, career guidance, related training and more.

*Data and metrics allow for continuous improvement.*

States developed metrics of success and reporting requirements at the outset of the career academy program to improve data tracking. The reports are completed by the individual schools or districts on a regular basis, including enrollment and retention, measurable skills gained, work-based learning experiences completed and student transition into postsecondary education and/or employment. This data has allowed states to track the progress of the career academy model, make necessary adjustments to improve the model, and show return on investment.

## **PEER STATE CASE STUDIES**

The following peer state case studies of Delaware, Massachusetts and Wisconsin are provided as successful examples of career academies. Each case study includes information on the creation of the

career academy model, program basics, governance, funding, measuring impact, expansion, communication and additional resources. Please note that while each state uses the term “pathway” in their program name, the structure more closely mirrors that of a career academy rather than a career pathway program, as defined by WIOA.

## **Delaware**

### *Creation*

Facing economic disruptions throughout the late 2000s and early 2010s, Delaware recognized that high school students needed to graduate with skills to meet evolving labor market demand. In response, [Delaware Pathways](#) (initially dubbed “Pathways to Prosperity”) was formally established by then Governor Jack Markell in via [executive order](#) in 2016. The program also aimed to help achieve Governor Markell’s “[Delaware Promise](#),” which set a goal of 65% of the state’s workforce earning a college degree or professional certificate by 2025, and every student graduating from high school being prepared for continuing education and a career. The program consists of state-approved career pathways that include high school and advanced coursework, work-based learning experiences, and industry-recognized credentials that prepare students for middle- or high-skill in-demand careers.

Delaware Pathways was led by the Delaware Pathways Steering Committee comprised of the Delaware Technical Community College, Delaware Department of Labor, Delaware Department of Education, other state agencies, private companies and non-profit entities. Advanced manufacturing was the first pathway launched during the 2014-15 school year in two school districts serving 40 students. A [case study](#) of the initiative suggests that public and private sector stakeholder engagement, led by the Governor’s office, was key to a successful launch. The Delaware Department of Education, Delaware Department of Labor and the Delaware Technical College system provided administrative leadership while employers and industry representatives ensured the program was aligned to industry needs.

### *Program Basics*

All public-school students in grades 9-12, including those at vocational-technical schools and charters, are eligible to participate. In the 2023-24 school year, students in select middle schools also engaged in pilot programming. Each pathway consists of at least three levels of consecutive classes, typically taken over a three-to-four-year period. Participants also engage in a work-based learning experience, such as internships, pre-apprenticeships, job shadowing opportunities, and mentorship with industry professionals. All pathways culminate in postsecondary credit and/or an industry-recognized certification.

### *Governance*

The Delaware Department of Education (DDOE), Delaware Department of Labor (DDOL), Delaware Workforce Development Board, Delaware Tech and Rodel/United Way of Delaware are each responsible for one aspect of the program’s administration:

- Build a comprehensive system of career preparation for grades 7-14 that aligns with the state and regional economies (led by DDOE).
- Scale and sustain meaningful work-based learning experiences for students in grades 7-14 (led by Delaware Tech).
- Integrate education and workforce development efforts and data systems (led by DDOL).
- Coordinate financial support (jointly led by Rodel and the United Way of Delaware).
- Engage employers, educators, and service providers to support Delaware Pathways (led by the Delaware Workforce Development Board).

Once a pathway has been established at the state level, local school boards can choose to adopt and offer it to students. School districts may decide which pathways to offer and are not required by the state to offer any pathways.

### *Funding*

The development of Delaware Pathways was [funded](#) through federal sources (especially Perkins V) and philanthropic grants. Federal funds supported curriculum development, teacher professional development, and state staff time for program coordination while philanthropic grants funded general and sector-specific pathway expansion as well as an intermediary to connect schools and employers for work-based learning opportunities. Once established, Delaware sought more sustainable funding mechanisms, including federal programs such as Perkins V, WIOA and more recently, the American Rescue Plan Act. Delaware Pathways was included in state plans for these federal programs and the federal funds have helped school districts launch and maintain pathways programs. Additionally, the Delaware Department of Labor and Delaware Tech received grants from the U.S. Department of Labor to support industry certifications and expand apprenticeship programs, which align with the Delaware Pathways model. The Delaware Departments of Education, Labor, and Health and Social Services have all contributed funding to the program, with much of the state's CTE budget being allocated to administer Delaware Pathways. Notably, the Delaware Department of Education has also supported school districts in launching and sustaining the expansion of Delaware Pathways by providing professional development and capacity building resources.

### *Measuring impact*

The Delaware Pathways Steering Committee identified several metrics of success, including student enrollment, concentration and completion, early career experiences (work-based learning), student transition from secondary education to into postsecondary education and/or employment. School districts are responsible for collecting enrollment information along with student experiences and sharing it with the Delaware Department of Education. The state can then match enrollment with outcomes, though this process remains a challenge, especially for students who enter the workforce upon graduating.

There are currently 29 distinct pathways offered in 13 career clusters. Every high school in the state, including all 16 public school districts, all three technical schools and charter schools offer at least one pathway. During the [2022 school year](#), over half of the state's high school students (23,009 out of 44,059) were participating in a pathway. As a result, the state increased the goal to reach 80% of high school students by 2025.

### *Expansion*

New pathways are developed by the Delaware Pathways Steering Committee, which approves new programs that school districts can then choose to implement for their students.

### *Communication*

The state created buy-in across all necessary partners through the Delaware Pathways Steering Committee. Involving employers, community partners, school districts, and state agencies in the program's creation was paramount to the success of the program. Conveners such as the Delaware Workforce Development Board helped to leverage existing relationships with public and private stakeholders also helped to increase buy-in. School districts are responsible for communicating the model to parents and students, which has been generally successful.

### *Additional resources*

- [Delaware Pathways Strategic Plan](#)
- Bellwether - [Delaware Pathways Case Study](#)
- Advance CTE - [Delaware Pathways Highlight](#)
- RTI International - [Careers Baseline Report on Career Pathways and Work-Based Learning in Delaware](#)

## **Massachusetts**

### *Creation*

Massachusetts' [Innovation Career Pathways](#) (IP) program was launched in 2017 as a part of the state's [High Quality College and Career Pathways](#) (HQCCP), an initiative led by the Massachusetts Workforce Skills Cabinet to provide students with equitable access to a pathway, with on and off ramps across different pathways throughout high school, ensure that they graduate with a postsecondary plan and knowledge of Massachusetts' workforce opportunities. IP is one of the two HQCCP programs (along with Early College) that blends elements of high school and college courses by providing students with coursework and career experiences in a specific high-demand industry.

### *Program Basics*

Each IP must have broad industry sector alignment and is not meant to be occupation specific. There are five guiding principles, and six core characteristics required for each IP to be recognized.

### Guiding Principles

- Equitable Access
- Guided Academic Pathways
- Enhanced Student Support
- Connection to Career
- Effective Partnerships

### Core Characteristics

- **Career Advising:** Career advising supports each student to complete a college and career plan during high school that identifies areas of aptitude and interest, explores career opportunities, and establishes a transition path to college, apprenticeship, and/or employment training.
- **Labor Market Information:** The pathway is justified by labor market information related to employer demand and career opportunities.
- **Integrated Instruction:** Students participate in a sequence of integrated instructional courses relevant to their pathway, including both academic and technical subjects.
- **Work-Based Learning:** Students participate in structured work readiness activities and work-based learning experiences.
- **Credential Preparation:** The pathway enables students to make progress toward attainment of an industry-recognized credential or college credits toward a certificate, Associates, or Baccalaureate degree.
- **Postsecondary Linkages:** Students participate in a wide range of college awareness and engagement activities to inform their postsecondary plan, relating to college, apprenticeship and/or training programs.

Students in an IP must have a [MyCAP](#) (My Career and Academic Plan) which includes:

- At least two technical courses aligned with the industry sector
- At least two advanced courses, which can include dual enrollment, Advanced Placement, Project Lead The Way, or other college-level courses
- A 100-hour internship or capstone project, identified with a local course code that will be displayed on the student's transcript, taken later in high school.

### *Governance and Expansion*

The IP program is administered by the Massachusetts Department of Elementary and Secondary Education (DESE), with support and approval guidance from the Massachusetts Executive Office of Education and the Massachusetts Department of Higher Education.

School districts serve as the lead applicant for an IP and must identify at least one high school where the pathway will be available to students. The school district must partner with a local workforce

development board and at least one employer partner through a signed letter of agreement. A two-stage application process requires the school district and its partners to develop plans for each of the five guiding principles and provide evidence of preparedness for effective implementation. Once both stages are approved by the DESE Commissioner, the school district can begin scheduling students for a Fall launch of the pathway. Each designation is valid for five years and serves as a performance contact with oversight and evaluation by DESE.

DESE, in partnership with the Center for Collaborative Education, provides support to school districts and local workforce development board for program development and implementation through webinars, workshops, learning communities, office hours, peer ambassadors and communities of practice.

### *Funding*

The IP program has been funded through multiple iterations of one-time state appropriations, with no [sustained funding](#) yet allocated by the budgeting process. In 2019, American Student Assistance, a national nonprofit based in Massachusetts, provided \$1.8 million in [grants](#) to help high schools develop programs that prepare students for college and careers, including the IP program. Also in 2019, then Governor Charlie Baker's administration provided \$354,000 in planning grants to 21 high schools to develop IP programs, including: program administration and coordination; stipends for faculty; curricular development; engagement with local workforce development boards and industry; professional development; instructional-related supplies and materials; high quality college and career advising and MyCAP development embedded in the pathway. The state subsequently invested in these planning grants, with over \$450,000 in [2022](#), \$625,000 in 2023 and \$385,000 in [2024](#).

Additionally, DESE recently made [\\$4.5 million](#) in state-funded implementation grants available for school districts that received a pathway designation between 201 and 2024. Allowable uses for the implementation grant include: program administration and coordination; stipends faculty; curricular development; engagement with local workforce development boards and industry; providing work-based learning opportunities for students; professional development; instructional-related supplies and materials; high quality college and career advising and MyCAP development throughout the school and embedded in the pathway; industry recognized credentials; expenses associated with student participation in dual-enrollment courses.

Designated IP programs meet many of the requirements for federal funding under Perkins V but some requirements are not inherently covered by the IP designation criteria. School districts and individual schools are encouraged to consider whether to pursue federal Perkins V funding as part of the designation process, bearing in mind that there are additional reporting, performance, accountability and monitoring expectations.

### *Measuring impact*

DESE leads the oversight and evaluation of IPs. Data is collected by the school district, shared with DESE and used to measure performance in relation to outcomes detailed in the school district's application. Performance metrics include but are not limited to:

- Program retention rate of participating students,
- high school graduation rate of participating students,
- skill gain of students in internship or capstone as measured through the Massachusetts Work-Based Learning Plan for internships, and an equivalent tool for capstone projects,
- percentage of participating students who complete the program,
- percentage of participating students who gain postsecondary credits and how many credits,
- percentage of participating students who achieve an associate or bachelor's degree within three or six years of high school graduation, and
- college and/or career outcomes of students.

During the 2024-2025 school year, almost 25% of eligible high schools offer IPs with approximately 8,000 students enrolled in one or more of the 226 IPs. DESE also reported the following findings:

- IP students were over two times more likely to graduate with completion of the Massachusetts Core Curriculum (a college readiness indicator) than comparison students.
- IP students had higher attendance rates than comparison students (95 percent vs. 92 percent)
- IP students had 40 percent fewer disciplinary incidents than the comparison group.

#### *Communication*

The Massachusetts Workforce Skills Cabinet has championed the IP program since it was launched as part of the HQCCP initiative in 2017. The Cabinet includes members of the Massachusetts Executive Offices of Education, Massachusetts Department of Labor and Workforce Development, and Massachusetts Department of Housing and Economic Development, so all necessary state partners were brought into the program from its inception. Seed funding and technical support to school districts when the IP program launched provided the incentives to promote uptake.

School districts and local workforce development boards are responsible for communicating IP programs to students, parents, employers and other partners. As a part of the designation application process, school districts must submit a written communication plan for targeting identified audiences, parents, community members, school board, higher education personnel which includes materials used for outreach, including but not limited to, brochures and marketing in Spanish, English, and/or relevant second language(s), and a calendar of family outreach events and other opportunities to educate students, counselors, principals, parents, the school board, and community members.

#### *Additional resources*

- [Innovation Career Pathway Background and Designation Criteria](#)
- [Innovation Career Pathways Process Presentation](#)
- [Office of College, Career and Technical Education Pathways Strategies](#)
- Advance CTE [Resource on Innovation Career Pathways](#)

## **Wisconsin**

#### *Creation*

The [Pathways Wisconsin](#) pilot program was launched in 2016 by the Wisconsin Department of Public Instruction (DPI) to support the design and implementation of career pathways in industries identified as high demand by the state. The program was initially rolled out with four industries in four regions with the intention of building a scalable model that could be replicated by school districts across the state.

During the 2017-2018 school year, Pathways Wisconsin was integrated into the rollout of the statewide [Academic and Career Planning \(ACP\) policy](#). ACP is an initiative codified by the state legislature in 2015 requiring Wisconsin public schools to provide career services to students in grades 6-12. Since then, Pathways Wisconsin, now referred to as Regional Career Pathways (RCP), has expanded throughout the state and is governed by regional collaboratives representing the industry needs of seven regions, providing a model for each to integrate career pathways for in-demand careers into the local public education system.

#### *Governance*

The state selects which industries are eligible for an RCP program through regional labor market and economic analysis. Selected industries must have greater-than-average growth in a 10-year labor demand projection. The state also develops career cluster crosswalks to examine how the industry's requirements for skills and credentials align with educational opportunities. Clusters are prioritized if they have labor demand at multiple education and skill levels.

Collaboratives across [seven regions](#) aligned with the state’s regional economic development organizations are tasked with developing RCPs that address local workforce and economic development goals. The regional collaboratives act as RCP advisory groups charged with selecting, building, and evaluating high-skill, in-demand regional career pathways to be implemented in high schools. Each of the regional collaboratives can apply to offer RCPs within their school districts. Currently, all of the collaboratives support between six and ten approved pathways, with administrative support and materials for implementation by the school district provided by the [regional Cooperative Educational Service Agencies \(CESAs\)](#).

### *Program Basics*

Regional collaboratives of employers, workforce and economic development organizations, higher education, school districts, and CESAs design RCPs for in-demand industries in their region and apply to DPI for approval. Approved RCPs must include two of the following:

- A sequence of aligned courses,
- An industry-recognized credential,
- Dual college credit classes,
- Career-based and work-based learning experiences, and
- Related career and technical student organizations

### *Funding*

Funding for the 2016 pilot program was provided by the JPMorgan Chase New Skills for Youth (NSFY) grant. Funding has since been allocated through the [2020 Wisconsin Perkins State Plan](#), with Perkins V secondary reserve funds made available to promote the development, implementation, promotion, and monitoring of career pathways at the regional level aligned with state-identified high-skill, in-demand occupations or industries. Funding was allocated across the four years of the Perkins State Plan for the following:

- Year One (2020-21): Create the infrastructure necessary for regional career pathway development.
- Year Two (2021-22): Engage and promote students to access, participate, and complete regional career pathways.
- Year Three (2022-23) and Year Four (2023-24): Ensure access and equity are addressed in regional career pathway access, participation, and completion with an emphasis on special populations.

### *Expansion*

The state developed a [model education and training career pathway](#) to provide a replicable template to regional collaboratives for mapping opportunities and requirements related to each pathway. This model includes credentials and certifications for the industry, opportunities for career and technical education, work-based learning, and college credit, and additional labor market information.

In [2023](#), DPI set a goal to grow the number of school districts offering one or more RCPs from 47% (196 districts) to 100% (421 districts) and create a statewide K-12 career readiness system that increases the number of students:

- participating in and concentrating in career and technical education courses,
- participating in career-based learning experiences,
- participating in work-based learning,
- participating in dual enrollment,
- completing industry-recognized credentials, and
- participating in career and technical student organizations.

## **ADDITIONAL STATE EXAMPLES**

## **California**

California's [Partnership Academy](#) is a three-year "school-within-a-school" program for students in grades 10-12. The California Department of Education oversees the administration of the program at the state level while local school districts implement the Academy in partnership with employer representatives.

## **Montana**

The [Montana Career Pathways](#) program, launched in 2017 after a program overhaul, is a [joint initiative](#) of the Montana Office of the Commissioner of Higher Education and the Montana Office of Public Instruction (OPI). The goal of the overhaul was to create a statewide pathways program scalable to all high schools and connected to all Montana University System colleges. The program focuses on the state's CTE system with pathways that are approved by OPI and implemented by school district's CTE programs. Montana Career Pathways is supported in part by Perkins V Rural Reserve Funds and Strengthening Montana Career Pathways Grants that were allocated in 2017 to drive collaboration between secondary and postsecondary educators across the state to expand access to programs that support a career pathway.

## **New Hampshire**

Governor Chris Sununu launched [New Hampshire Career Academies](#) in 2019 to create a pathway for students to earn a high school diploma, an associate's degree or professional certificate and a job interview at no cost to them in just two years. The program is administered through a partnership between the New Hampshire Department of Education and the Community College System of New Hampshire. Students must complete the program requirements in a two-year period beginning in their senior year of high school. Career Academy students enroll in a New Hampshire charter school where they complete their high school diploma requirements with all instruction taking place at a community college. The program is funded through the state's student adequacy [grants](#) for public school students. These grants, that would traditionally go to the student's high school, instead go to the charter high school for program administration and to the community college to pay tuition.

## **Rhode Island**

[PrepareRI](#) was launched in 2017 with funding from a private sector grant with the goal to bridge the gaps for students between secondary education, postsecondary education and the workforce. PrepareRI is supported by an interagency task force that includes the Rhode Island Department of Education, the Rhode Island Governor's Workforce Board, and the Rhode Island Office of the Postsecondary Commissioner. While the PrepareRI model is a broader approach to aligning education and workforce development, it does offer [Guided Pathways](#) which play a similar function to Career Academies in other states. To receive a Guided Pathway Endorsement, a student must complete three related academic courses, a work-based learning experience and a performance-based assessment, such as a capstone project.

## **Vermont**

Vermont implemented [Career Pathways](#) in 2018 following [legislation](#) that prompted the Vermont Agency of Education, in partnership with the Department of Labor and Department of Economic Development to create a program where school offerings align to the skills needs of Vermont's key industries. The Career Pathways program has characteristics very similar to those outlined in the states above. Still in its infancy, the Agency of Education as the administrator of the program is in the process of implementing the system in Regional Technical Centers, high schools and middle schools, with articulation agreements with colleges and universities in the state.