# CATALYZING INNOVATION Transforming High Schools Statewide by Scaling up College & Career Readiness High School Models







Education Strategy Group

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## INTRODUCTION

In the midst of a rapidly changing economy that requires education and training beyond high school, state educational leaders are prioritizing high school models focused on improving students' readiness for career success. To do so, they increasingly seek innovative approaches beyond traditional policy levers to drive high school transformation.

Over the past two decades, several states have successfully scaled innovative **college and career readiness high school models**. School models focused on college and career readiness feature deep collaboration with colleges and universities and exemplify how to better align high school programs with workforce needs. These schools are structured to create college-going cultures and provide increased access to career pathways leading to college certificates and degrees. States pursuing the expansion of these models encourage local communities to reimagine the traditional comprehensive high school model to improve college and career readiness for all students.

To understand how states can support and catalyze innovative high schools and regional partnerships featuring career-connected learning, **Education Strategy Group (ESG) examined statewide initiatives that have scaled college and career readiness high school models in four leading states: Georgia, Iowa, North Carolina, and Virginia**. Each state—responding to distinct circumstances and operating within a range of policy environments—developed statewide approaches to foster innovation by establishing specialized college and career readiness high schools or regional partnerships.

Legislation in these states established the policy frameworks, set accountability mechanisms, and provided start-up funding to local communities. The laws each seek to foster deeper collaboration between school districts, higher education institutions, and employers to leverage career-connected learning. These schools and regional partnerships place an intensive focus on providing all students with exposure to in-demand careers and early access to coursework leading to college credentials and degrees. This resource highlights the governance structures, funding strategies, and partnerships that underpin the sustainability and effectiveness of college and career readiness high school models in the profiled states.

### **RESEARCH QUESTIONS**

ESG identified the following research questions to guide this work:



**Catalysts for Career-Connected Learning:** How can states catalyze and support partnerships between school districts, higher education, and industry to advance career-connected learning by scaling college and career readiness high school models?



**Local Governance and State Oversight:** What governance structures and collaborative approaches between K-12, higher education, and industry stakeholders are foundational to creating and sustaining local high school models and regional partnerships? What mechanisms can states use to approve and designate college and career models that spur innovation, yet provide appropriate levels of oversight and accountability?



**State Funding Support:** How can state funding, including start-up support, operational funding, and capital investments, promote the growth and long-term sustainability of college and career readiness high school models in collaboration with institutions of higher education, local industry, and community partners?



# STATE APPROACHES TO SCALING COLLEGE AND CAREER READINESS HIGH SCHOOL MODELS AND REGIONAL PARTNERSHIPS

ESG researched state programs that promote college and career readiness high school models in a dozen states. To illustrate a range of statewide approaches to sparking and sustaining innovation through school models in a variety of policy environments, ESG selected programs in Georgia, Iowa, North Carolina, and Virginia to highlight.

While distinct circumstances led to these four states embarking on model school initiatives, each has subsequently codified the programs in legislation and established state appropriations for funding school start-up needs. Financial sustainability is maintained through a combination of state and local operating funding mechanisms.

Common to local organizational structures in all four states is the concept of shared governance, with specific requirements for collaboration between K-12 and higher education partners. Each state also provides for state-level coordination and an approvals process.

MODEL AND	SCALE	STRUCTURE
Georg	ia's College and Career Academies	
ESTABLISHED	2007	<ul> <li>K-12 school operated by a nonprofit governing board, established as a charter school or pursuant to a district contract for strategic waivers.</li> <li>Typically located within, or in close proximity to, high schools or technical colleges.</li> </ul>
AS OF 2024	58 college and career academies	
ENROLLMENT	Approximately 47,000 students (2024-25), representing 9% of all public high school students	
lowa's	s Career and Technical Education Regional Centers	
ESTABLISHED	2016 with CTE redesign legislation	• Organized by regional planning partnerships between school districts, at least one community college, and workforce agencies.
AS OF 2024	30 regional centers across 15 regional planning partnerships	
ENROLLMENT	6,872 students (2022-23), representing 4% of all public high school students	• Co-located with, or in close proximity to, a community college.
- North	Carolina's Cooperative Innovative High Schools	
ESTABLISHED	2004	Managed by local school districts and governed by a partnership agreement
AS OF 2024	134 Cooperative Innovative High Schools	between the high school and local community college or university.
ENROLLMENT	28,942 students (2023-24), representing 6% of all public high school students	Mostly located on the partnering institution's campus.
Lingin	ia's College Partnership Laboratory Schools	
ESTABLISHED	2010 (initial statutory language) with enhancements and funding in 2022	<ul> <li>Established by postsecondary institutions in partnership with community partners, local school boards, employers, and local businesses, overseen by governing boards.</li> <li>Public schools operated by college or university with programming administered on both the postsecondary campus and within the partner local school division campuses/facilities as well as on-site work-based learning with partner industries.</li> </ul>
AS OF 2024	1 Lab School opened in Fall 2023; 5 Lab Schools opened in Fall 2024; 9 additional schools approved to open in Fall 2025 (as of May 2025)	
ENROLLMENT	By year four, the fifteen Lab Schools are projected to serve over 5,000 students, representing nearly 2% of high school students	

# COLLEGE AND CAREER READINESS HIGH SCHOOL MODELS ARE NOT ONE-SIZE-FITS-ALL

Each of the four profiled states promotes unique high school models featuring **collaborative, crosssector partnerships** that include a significant role for higher education partners in school governance. A common feature of the profiled college and career readiness high school models is centered on **industry partnerships** that provide work-based learning and career exposure at scale, linking students' classroom learning with real-world experiences. The high school models these states catalyze are not one-size-fitsall across local communities and regions. Instead, they prioritize approaches that meet broad criteria that include early postsecondary coursework, advanced career and technical education, work-based learning opportunities, and partnerships with higher education institutions and business and industry. In some cases, they are focused on college and career pathways aligned to one or more specific industry sectors, while others provide a range of pathways for students to pursue.

These partnerships accomplish more than one system could provide for students on its own, foster collaboration among multiple school districts, enable work-based learning and career exposure at scale, and serve students who would not otherwise have access to such programming. Shared governance structures with roles for workforce development councils and employers enable the schools to respond to industry needs with an integrated educational approach.

The models also include structured sequences of degree-specific **dual enrollment coursework** in applied majors. These include, but are not limited to, **Early College High School (ECHS) models**—the best known approach to structured dual enrollment pathways that provide a tuition-fee experience for high school students to earn associate degrees or a significant amount of transferable credit toward a degree. North Carolina's successes with the Early College High School model over the past two decades are included as a leading example of state support for this model. Early colleges have also received state investments in California, Colorado, Indiana, Massachusetts, Michigan, New York, Ohio, Texas, and Utah. The higher education partnership models promoted in the other profiled states feature some common components with Early College High Schools, but diverge in other ways.

Another often replicated public-private partnership college and career readiness high school model is **Pathways in Technology Early College High School (P-TECH)**. P-TECH integrates high school, college, and career preparation within a seamless program. Launched in 2011 in Brooklyn, New York in collaboration with IBM, the P-TECH program has subsequently scaled nationally and globally. P-TECH schools are typically a six-year program serving students in grades 9–14, allowing students to earn a high school diploma and a no-cost, two-year STEM associate's degree. They typically focus on a single field of study, such as information technology, healthcare, or advanced manufacturing, The program includes mentorship, workplace experiences, paid internships with one or more employer partners, and an opportunity for immediate employment at a partner business.

The variety of college and career readiness high school models across states reflects a shared commitment to expanding educational opportunities while adapting to local needs. The table below provides an overview of states implementing school model strategies, including the specific school models supported in each state and the agencies responsible for their oversight, designation, or approval processes.

State	CCRSM School Models	State Oversight
California	<ul><li>Early College High Schools</li><li>Middle College High Schools</li></ul>	California Community College System and California Department of Education (grant funding only)
Colorado	Early College High Schools     P-TECH	Colorado State Board of Education
Connecticut	• P-TECH	Connecticut Department of Education
Georgia	College and Career Academies	Technical College System of Georgia (TCSG)
Indiana	<ul><li> Early College High Schools</li><li> P-TECH</li></ul>	Center of Excellence in Leadership of Learning (CELL) at the University of Indianapolis (non-governmental organization)
lowa	CTE Regional Centers	lowa Department of Education
Massachusetts	<ul><li> Early College programs</li><li> Early College Promise programs</li></ul>	Massachusetts Department of Elementary and Secondary Education and Massachusetts Department of Higher Education
Michigan	<ul> <li>Early Middle College High Schools</li> <li>Early Middle College Programs</li> <li>Early Middle College Consortiums</li> </ul>	Michigan Early/Middle College Association (non-governmental organization)
Minnesota	Early/Middle College Programs	Minnesota Department of Education
New York	<ul> <li>P-TECH</li> <li>Smart Scholars Early College High Schools</li> <li>Smart Transfer Early College High Schools</li> </ul>	New York State Education Department (grant funding only)
North Carolina	Cooperative Innovative High Schools	Joint Advisory Committee (interagency comprised of state K12 agency, community college system, university system, and independent colleges association)
Ohio	Early College High Schools	Ohio Department of Higher Education
Rhode Island	• P-TECH	Rhode Island Department of Education
Texas	<ul><li> Early College High Schools</li><li> P-TECH</li></ul>	Texas Education Agency
Utah	Early College High Schools	Utah State Board of Education
Virginia	<ul> <li>Governor's Lab Schools</li> <li>Governor's STEM Academies</li> <li>Governor's Health Sciences Academies</li> </ul>	Virginia Board of Education

As states continue to refine and expand these models, a set of key features emerges that contribute to their effectiveness. These features—including workforce alignment, postsecondary transitions, expanded access, and cross-sector collaboration—serve as critical drivers in ensuring students are prepared for both college and careers. By integrating these core elements, college and career readiness high school models not only support individual student success but also strengthen regional economies and workforce pipelines.

#### Common Features of College and Career Readiness High School Models

- Workforce Alignment and Economic Development: College and career readiness high school models help align education with workforce needs, preparing students for in-demand jobs by offering careerconnected learning, industry-relevant credentials, and advanced technical training. This drives regional economic growth and ensures a pipeline of skilled workers to meet industry demand.
- Postsecondary Transitions: These models provide students with early exposure to college through dual enrollment courses in both degree-specific and general education subjects, making them more likely to enroll in and complete college.
- Expanding Access: These models often target historically underserved students by providing all students with courses that are otherwise unavailable in traditional schools (or available to only a select few students), particularly in rural schools and urban districts. They ensure widespread access to advanced career pathways and postsecondary options.
- Cross-Sector Collaboration: These models foster focused partnerships between high schools, colleges and universities, and employers. Clear and specialized missions result in schools that respond to local and state workforce needs more effectively than any single system could accomplish alone.



### STATE INFRASTRUCTURE TO SUPPORT MODEL ADOPTION AND OVERSIGHT

States have a unique opportunity to help local communities innovate and reimagine traditional, comprehensive high schools by building a robust ecosystem of college and career readiness high school models. Balancing local flexibility with state coordination and designation ensures that schools can tailor programs to local economic needs while maintaining consistent quality and oversight.

**INITIAL APPROVAL:** All four of the example states have a formal process to approve proposals from local partnerships to establish new college and career readiness school models, which also unlocks state funding in these states. Each has developed criteria that are specific to the state's priorities for model schools. In many states, decisions to approve school models are made by the Department of Education or the State Board of Education. Interagency reviews are conducted in Georgia and North Carolina, while Virginia convenes a Lab School Standing Committee of the Board of Education to provide stakeholder input to the Department of Education on new Lab School applications. Indiana and Michigan (see page 5) contract with non-governmental education intermediaries to certify early colleges in their states.

**DESIGNATION PROCESS:** Georgia and Virginia both feature a five-year renewal cycle, providing stability to a newly-established school and sufficient time for the program to mature and meet key indicators or benchmarks. Establishing clear expectations and a process to designate schools that meet indicators of quality implementation provides school leaders with guideposts to work toward as they mature. Schools or regional partnerships are subject to existing statewide high school or Perkins accountability systems, depending on how they are organized. However, these are not always well-aligned with performance indicators and outcomes specifically aligned to the school model. A designation or endorsement process provides information to state leaders on the outcomes and characteristics of successful implementations that can be used to promote the initiative, and to identify common areas across schools that need greater support. Texas' Early College High School and P-TECH Designation process creates a "Distinguished" level beyond basic designation for those schools with exemplary performance in specific categories of its outcomes-based measures.

**CATALYZING GROWTH IN THE ADOPTION OF SCHOOL MODELS**: States have invested in resources, communities of practice, and technical assistance to create interest and capacity for expanding school models. This is important for building awareness of the possibilities and benefits of the initiative, as well as supporting school leaders in planning and implementation. Technical assistance is often provided via public-private partnerships, and in some cases is provided solely by non-governmental education intermediaries. The Georgia College & Career Academy Network is hosted by the Georgia Association of Career and Technical Education, with support from the Technical College System of Georgia. The independent Massachusetts Alliance for Early College has created a field guide and workbook for local organizations conducting a planning year before applying for state approvals.

## **GEORGIA'S** COLLEGE & CAREER ACADEMIES

Established by legislation in 2007, Georgia College and Career Academies (GCCAs) are specialized schools established as charter schools or within school systems to tailor education to meet the needs of the local community. GCCAs are a model for blending education with workforce opportunities, driven by robust partnerships between secondary schools, higher education institutions, and local industries.

The state currently has 58 recognized academies, serving approximately 47,000 students in the 2024-25 school year. Each academy selects industry sectors relevant to the specific needs of their regional economy. All GCCAs provide students with career-connected learning experiences, but the emphasis within each school varies; high percentages of students at some academies earn an industry-based technical certificate, while others focus more on work-based learning opportunities or career-relevant dual enrollment.



#### **Catalyst for Career-Connected Learning**

GCCAs directly connect high school students with the workforce through partnerships with local businesses and higher education institutions. Each academy tailors its programs to meet the specific workforce demands of its region, offering students hands-on experience in fields such as advanced manufacturing, healthcare, and technology. The academies offer students career-relevant dual enrollment opportunities and seamlessly integrate high school and college programs. GCCAs are typically located within, or in close proximity to, high schools or technical colleges.



#### Local Governance and State Oversight

Georgia law outlines multiple pathways for local governance and with partnerships roles for local school districts, businesses, and postsecondary institutions. The two distinct governance models are charter contracts and state waiver agreements:

- Charter School Contracts: Many College and Career Academies operate as independent charter schools through performance-based contracts approved by the State Board of Education. These academies follow the regulatory framework outlined in state law requiring annual reporting to the General Assembly on their status and effectiveness.
- Strategic Waivers School System and Charter System Contracts: Some academies are incorporated into district-level strategic waivers school system agreements or "charter system" contracts. These models allow districts to operate academies with flexibility in meeting state education requirements while aligning with local workforce needs.

The Technical College System of Georgia (TCSG), in partnership with the Georgia Department of Education (GaDOE) and the State Board of Education, oversees the initial certification process for the Georgia College and Career Academies. Certification requirements include:

- Compliance with workforce-aligned program standards.
- **D** Submission of annual performance reports to TCSG via the Department of Education.
- Participation in statewide articulation agreements allowing students to earn TCSG college credits for certain Career, Technical, and Agricultural Education courses.

To minimize redundancy and burden on schools, certification renewals were incorporated into the standard 5-year school accreditation cycle that most schools go through with the independent school accreditor Cognia (previously known as AdvancED). Schools complete a specific College and Career Academy self-assessment that is the basis for the external evaluation. The Cognia team includes its evaluation of how the school demonstrates adherence to the College and Career Academy criteria, and reports its evaluation to TCSG to make its certification determination.

An update to state law in 2011 reinforced the role of College and Career Academies as specialized institutions designed to advance workforce development through partnerships between school districts, businesses, and postsecondary institutions. The legislation also formalized the Office of College and Career Transitions within TCSG to oversee academy certification and support. By integrating flexibility with structured state oversight, Georgia's College and Career Academies remain highly adaptable to regional workforce needs while maintaining rigorous educational standards.

#### **State Funding Support**

GCCAs are supported by a combination of state and local funding, with a focus on fostering sustainability and growth. The state provides one-time grants of up to \$3 million to newly-established academies (over \$150 million to date) for planning, capital investments, and operational expenses. Grants are awarded on a competitive basis, with applicants preparing proposals and presenting to a committee, demonstrating both community support and alignment with workforce needs. Over the years, GCCA has received consistent financial backing, including local bond funding and state budget allocations. Established schools receive state per pupil funding allocated to full-time equivalent students, as well as additional Career, Technical, and Agricultural Education per-pupil funding. These funds are generated directly for schools with their own school code, or apportioned if the academy is coded as a program within a district. Some academies supplement government funding with contributions from philanthropy and employers.

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#### **Unique Program Components**

Each College and Career Academy in Georgia is tailored to the needs of its local community. The flexibility provided through charter contracts allows academies to implement creative solutions, such as hiring industry professionals as instructors and customizing curriculum to fit the skills needed in high-demand sectors. Many academies offer students opportunities to engage in hands-on learning experiences, internships, and apprenticeships in industries that are vital to the local economy.

The GCCAs have provided a platform for implementing new state policy and initiatives at scale. Georgia recently launched an Accelerated Career Diploma, which enables a student to graduate high school after completing only two years of high school core academic courses if they also earn an associate degree, a technical diploma (37-59 credit hours), or two college-issued technical certificates in a specific career pathway. Students can tap into state dual enrollment financial aid to cover college tuition. The College and Career Academies have served as a test-bed for student enrollment in the Accelerated Career Diploma program, given their existing higher education partnerships that enable students to earn the Diploma.

#### RESOURCES TO LEARN MORE

- Technical College System of Georgia College and Career Academies
- Technical College System of Georgia Annual Report and Fast Facts
- Central Educational Center
- Strengthening Education to Drive Economic
   Development: A Manual for Replicating "The
   CEC Experience" in Your
   Community, Academy for
   Educational Development

## SPOTLIGHT

## How Innovation in One Community Spread Statewide in Georgia

In 1997, a group of county leaders in Coweta County southwest of Atlanta convened to examine educational and workforce issues, recognizing the vitality of their community and future economic development was inextricably connected to the quality of education and training. Education and government leaders heard from local business and industry leaders who believed that area high school graduates were not adequately prepared for the Atlanta-area labor market. The resulting Coweta County Central Educational Center (CEC) was launched by the district with a goal for students to earn technical college certificates or industry recognized credentials in addition to a high school diploma in a unique school setting.

Open to any high school student in the county, CEC partners with West Georgia Technical College to offer dual enrollment in academic, technical, and occupational subjects. CEC partners with over 300 business and industry partners, who provide job shadowing, mentoring, and work-based learning opportunities in a wide range of fields, including aviation, computer science, construction, education, engineering, graphic arts, healthcare, manufacturing, and robotics.

Local employers also participate in curriculum development to adapt to changing industry needs. For example, CEC worked with local manufacturing firms in 2015 to launch an Accelerated Career Diploma Program in manufacturing engineering technology and the state's first German-certified A-level Apprenticeship Program that starts at age 15.

CEC's approach to workforce development has benefited local industry, strengthening partnerships with existing employers, including Piedmont Newnan Hospital and City of Hope (formerly Cancer Treatment Center of America), and supporting local economic growth through recruitment of investment by major companies, including Yamaha Motor Manufacturing Corporation. As a locally and state-approved, locally-operated charter school, the administrators and teachers at CEC have more flexibility in operating the school, selecting courses, and developing curriculum than they would have at a traditional high school. After twenty-five years of operation, CEC now enrolls approximately 21 percent of all high school age students in Coweta County, and includes an eighth-grade academy program. By the time students graduate from Coweta County high schools, approximately 50 percent have taken part in CEC programs and courses.

CEC's early success led to it becoming the model for the Georgia College and Career Academies, with grants from the state supporting replication in three districts across the state during the 2003–2006 period. This set the foundation for the statewide legislation and approach to scaling the college and career academy model.

## **IOWA'S** CAREER & TECHNICAL EDUCATION REGIONAL CENTERS

Iowa's 30 Career and Technical Education (CTE) Regional Centers serve 4% of public high school students across the state through collaborative partnerships. Codified in legislation in 2016, the CTE Regional Centers create a career-oriented structure that connects high school with community college programs. Most students in the CTE Regional Centers attend college classes for part of their school day with a cohort of high school students in their chosen pathway, and return to their home high school for the remainder of their school day.



#### **Catalyst for Career-Connected Learning**

The CTE Regional Centers emphasize career-connected learning, allowing students to gain real-world skills and experiences aligned with regional workforce needs. Regional Centers are physical locations where CTE programs are delivered, providing access to at least four career academy programs. To qualify as a regional center, a facility must either serve at least four partner school districts or enroll a minimum of 120 students from at least two districts. These centers are designed to maximize collaboration and efficiently offer high-quality, industry-aligned CTE programming, often utilizing state-of-the-art equipment that individual school districts may not be able to afford on their own.

Career academies are structured programs of study that bridge high school and community college coursework. They feature three key elements:

- Dual Enrollment (known as concurrent enrollment in Iowa): Students earn both high school and college credit through community college coursework.
- Thematic Course Sequences: Coursework is aligned to a specific career pathway, preparing students for both postsecondary education and the workforce.
- Strong Partnerships: Programs are developed in collaboration with employers, school districts, higher education institutions, and community stakeholders.

Career academies offering a complete CTE program of study can be housed at a Regional Center, a high school (potentially shared across districts), or any community college. Career academies are integrated programs, featuring career guidance, work-based learning opportunities, and curriculum tailored to labor market demands.



#### Local Governance and State Oversight

The governance of Iowa's CTE Regional Centers is rooted in strong local partnerships and collaboration, with oversight and funding provided by the state.

These centers are developed and coordinated by the state's 15 Regional Planning Partnerships (RPPs), which are responsible for ensuring access to high-quality career and technical education programs across both rural and urbanized regions. The partnerships include representatives from local school districts, community colleges, regional workforce entities, business and industry leaders, work-based learning intermediaries, and CTE faculty.

While the planning and coordination of regional centers are led at the local level, state policy and funding play a significant role in their development. The 2016 CTE Redesign legislation tasked RPPs with expanding regional centers statewide to ensure all high school students have access to career pathways. The Iowa Department of Education provides oversight by setting minimum standards for career academies and ensuring compliance with federal CTE regulations. Individual career academies can be established by a RPP or by an agreement between a single school district and a community college.

Regional planning partnerships provide a collaborative approach to local CTE program delivery with state oversight and accountability. Under Iowa law, each RPP must adopt bylaws, submit membership lists, document meeting minutes, and maintain a schedule of future meetings. Partnerships must annually submit a multiyear plan demonstrating effective program delivery, financial oversight, and workforce alignment. To retain approval, partnerships must show documented progress in meeting state expectations. The Iowa Department of Education conducts annual reviews of each RPP's financial and operational status. In cases where deficiencies are identified, the state works with the partnership to establish corrective action plans with defined timelines. Failure to meet improvement benchmarks may result in restructuring or merging of partnerships.

## SPOTLIGHT

### **Upgrading Career Education in Rural Communities**

The newly launched (Fall 2024) Irma W. Winslow Education Center at Indian Hills Community College's Centerville campus serves as a key regional hub for career and technical education in a rural part of the college's service region. Centerville is a town of 5,000 residents an hour from the college's main campus in Ottumwa, with many rural high schools a further distance. The new 66,000-square-foot facility, supported in part by the state's Career Academy Incentive Fund and a local bond passed by voters, features 22 classroom spaces, laboratories, machine shops, a library, a 100 student dormitory, and a cafeteria, providing access to educational programs that were previously not available in this rural region to either high school students or adult college students. Planning for the center began after a regional center location study conducted by the Iowa Department of Education noted regions of the state that were lacking opportunities for career education. Previously, students wanting to take courses in construction technology, agriculture, health sciences, and welding pathways had to travel up to 90 minutes to Indian Hills' main campus in the city of Ottumwa.

Indian Hills has long offered Career Academies that bridge high school and college through dual enrollment coursework in multiple fields of study. Serving nearly 2,000 students each year from nineteen school districts across 10 counties, students in the high school academies complete an average of 13 credit hours each year. Students in Career Academies who choose to continue their studies at Indian Hills can qualify for a \$1,000 scholarship to support their tuition, books, and fees.



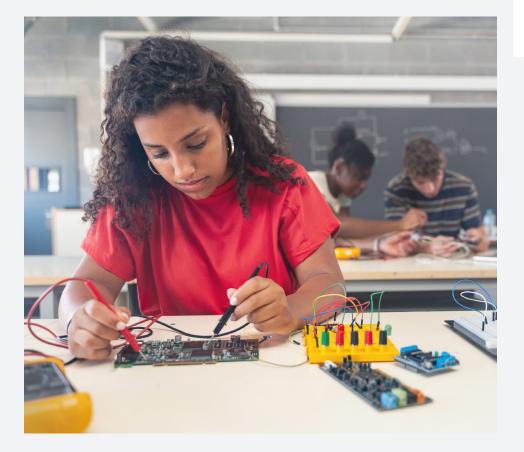
#### **State Funding Support**

To support regional center expansion, the state established the Career Academy Incentive Fund in 2019, funded through an extension of the statewide penny sales tax for school infrastructure. This fund provides targeted grants to support partnerships between school districts, community colleges, and industry, ensuring students have access to high-quality career pathways aligned with Iowa's workforce needs.

The Career Academy Incentive Fund allows the Iowa Department of Education to award up to \$5 million annually to support regional centers, increasing student access to college programs, state-of-the-art equipment, and career paths in Iowa's in-demand fields. The number of grants issued are based on the amount of available funds and types of applications received. New or expanding centers can receive grants of up to \$1 million for infrastructure, equipment, and operational improvements. Additionally, centers can leverage federal Perkins funding, and school districts receive additional funds based on a supplementary weighting model that incentivizes participation in CTE coursework.

### **Unique Program Components**

The CTE Regional Centers in Iowa offer a wide array of career pathways tailored to local industry demands. Students complete high school core classes along with specialized CTE coursework, enabling them to develop the skills necessary for success in their chosen fields. Dual enrollment is the hallmark of the Iowa career academies and students can participate in dual enrollment in grades 9-12.



#### RESOURCES TO LEARN MORE

- Iowa Department of Education Regional Planning Partnerships and Regional Centers
- Indian Hills Community College High School Programs

# **CAROLINA'S** COOPERATIVE INNOVATIVE

North Carolina Cooperative Innovative High Schools (CIHS), consisting of early college high schools and other innovative high schools, are small public high schools, usually located on the campus of a university or community college. Established in 2004 in response to persistently low high school graduation rates in the state, CIHS represented an effort to develop structured dual enrollment pathways specifically for students who are at risk of dropping out, first-generation college-goers, and those who would benefit from accelerated academic instruction. Coordinated through a partnership between the North Carolina Department of Public Instruction (NC DPI), the North Carolina Community Colleges System (NCCCS), and the University of North Carolina General Administration (UNCGA), CIHS schools are designed to expand educational opportunities through high-quality instructional programming.

The initiative was announced in 2003 with initial funding from the Gates Foundation, the state legislature, private companies, and local philanthropies. Over two decades, the CIHS school models has expanded to 134 schools statewide serving over 6% of the public high school population. CIHS recruit at-risk students and first-generation college students, and provide them with accelerated learning opportunities. Numerous research studies have demonstrated the positive impact that CIHS has had on North Carolina's high school graduation, college attendance, and college success rates. Among all advanced learning opportunities for NC high school students, CIHS serve the most diverse group of students, despite a requirement that they are open to any student as schools of choice.



#### **Catalyst for Career-Connected Learning**

While North Carolina's Cooperative Innovative High Schools serve as a model for integrating high school and college, most of them did not traditionally place as much emphasis on career preparation. The majority of students in most CIHS in the state are on a transfer pathway focused on general education courses that are broadly transferable to a four-year university. In recent years NC DPI and NCCSS have encouraged the expansion of career-themed CIHS to provide students pathways to locally-relevant associate degrees in applied fields. Given recent legislative limits on the numbers of new CIHS that can be established each year, the agencies refined the new school application process to provide competitive priorities for those with a career focus.

By partnering with higher education institutions and aligning curricula with industry needs, these career-focused schools allow students to earn college credits toward a technical certificate or associate degree while completing high school. A separate state initiative recognizes STEM Schools of Distinction that demonstrate how they meet expectations on a quality rubric, including offering dual enrollment coursework in STEM fields.



#### Local Governance and State Oversight

Each early college operates under a partnership agreement between the high school and a local community college or university. These agreements ensure that students can seamlessly transition between high school and college courses and that the programs align with regional workforce needs.

State oversight of CIHS schools is facilitated by the Joint Advisory Committee—comprised of representatives of the North Carolina Department of Public Instruction, the NC Community Colleges System, NC Independent Colleges and Universities, and the University of North Carolina General Administration. The Committee reviews applications for new schools, monitors existing ones, and makes recommendations to the State Board of Education.

Each CIHS submits an annual report to NC DPI, detailing total enrollment by grade level, college transfer and career and technical course completion, and qualitative student success stories. As public schools, all CIHS are held accountable under the same standards as other public schools in North Carolina.

NC DPI submits an annual report to the North Carolina General Assembly, providing a statewide perspective on the success and growth of the Career and College Promise dual enrollment and CIHS programs, including graduation rates, dropout rates, and enrollment for each CIHS, as well as student participation by school district.



#### **State Funding Support**

North Carolina's Cooperative Innovative High Schools benefit from a multi-tiered funding structure. Like other public schools, CIHS receive state funding based on Average Daily Membership allocations. In addition, most CIHS receive supplemental funding aligned with the economic tier level of the district in which they are located. Tier 1 county schools with high rates of economic challenges receive \$275,000 per year, Tier 2 schools receive \$220,000, and Tier 3 schools in wealthier communities receive \$180,000. This tiered system provides additional resources to districts in rural communities and other areas with limited property tax bases.

Supplemental funding is primarily used to support dual enrollment infrastructure, including college liaisons, academic advisors, and counselors who facilitate student success. Schools also allocate funds for textbooks and transportation, though capital expenses are not allowable.

## **STUDENT SPOTLIGHT**

North Carolina's extensive research into the impact of early college is reinforced by the day-to-day experiences and real-life impact of programs on the lives of students. Yesenia Sanchez Cruz, a 2025 senior and valedictorian at Edgecombe Early College High School, gave testimony to the North Carolina State Board of Education in February 2025 on how early college was a life-changing opportunity. As a first-generation college student and the child of Mexican immigrants, she saw early college as a stepping stone to a future filled with possibility. She experienced rigorous coursework, engaging project-based learning, a hands-on internship at a law firm in Rocky Mount, and the support of counselors to prepare for her next steps after high school. As a result she will graduate with a high school diploma, an associate of science degree, and a certificate in criminal justice technology. Yesenia has advanced considerably along her path to achieving her goal of becoming an immigration attorney, and will enroll in Fall 2025 as a law and justice student at North Carolina State University. Her story exemplifies the power of intentional early college program design to open doors for students who might not otherwise see themselves in higher education and opens doors to career options that were otherwise unavailable to them.

Tuition for college courses taken by CIHS students is covered by the state, which reimburses higher education institutions for tuition for dual enrollment (known as College and Career Promise). Local funding to CIHS flows through county commissioners in the same manner as other public schools, though early colleges serving multiple districts are rare. State legislation in 2020 limited CIHS expansion by capping additional state funding approvals for supplemental funding to three new schools per year, significantly constraining the model's continued growth.



#### **Unique Program Components**

North Carolina's CIHS offer distinctive features that set them apart from traditional high school models. CIHS schools enable students to begin dual enrollment as early as the ninth grade, providing them with the flexibility to pursue multiple pathways and tailor their educational experiences to align with both their academic goals and career aspirations.

North Carolina requires early college high schools to be located on the partnering institution's campus, unless the institutional board waives the requirement through adoption of a formal resolution. North Carolina also limits early colleges to no more than 100 students per grade level.

North Carolina's Cooperative Innovative High Schools and Career College Promise programs have focused dual enrollment in the state by providing structured pathways for students, especially those from underserved backgrounds. Through strong local governance, targeted state funding, and innovative program design, these schools have become vital components of the state's educational landscape.

#### RESOURCES TO LEARN MORE

- North Carolina Department of Public Instruction College and Career Promise
- Early College Research Center at the University of North Carolina at Greensboro

# SPOTLIGHT

## **Documenting Student Success in North Carolina**

With 20 years of experience since the establishment of Cooperative Innovative High Schools, researchers have extensively studied student outcomes and the positive impact that CIHS in North Carolina have had on higher rates of academic achievement, graduation, and postsecondary enrollment and completion.

With retention and graduation rates currently exceeding 95%, CIHS schools lead the state in helping students complete high school. Longitudinal, experimental design studies have documented the impact of CIHS on academic performance. For example, at community colleges, 87% of CIHS students earn a passing grade of C or better—14 percentage points higher than the general community college population. Positive outcomes are seen across demographic variables, including first-generation college goers and students from low-income backgrounds.

Beyond academics, CIHS students gain career-ready skills through an array of opportunities. In the 2022-2023 academic year, 1,591 students earned 3,473 industry-recognized credentials through Career and Technical Education courses, while 2,790 diploma and certificate credentials were awarded, representing a 559-credential increase from the previous year. For 2022-2023, 3,401 students graduated with an associate degree, an increase of 202 from the prior year.

An <u>Early College Research Center longitudinal study</u> from the University of North Carolina at Greensboro used an experimental design comparing college attainment by CIHS students who were accepted through a lottery to students who applied but were not accepted. The study found that 44% of CIHS students earned postsecondary credentials within six years of high school, compared to 33% of the control group. CIHS students were three times more likely to earn associate degrees (33% vs. 11%) and achieved degrees faster, with economically disadvantaged students 5 percentage points more likely to earn bachelor's degrees.

# VIRGINIA'S COLLEGE PARTNERSHIP LABORATORY SCHOOLS

Virginia's Lab Schools, formally known as College Partnership Laboratory Schools, are a new state initiative that encourages higher education institutions to establish regional elementary and secondary schools in partnership with employers and communities. The first Lab School opened in 2023 and five Lab Schools opened their doors to students in the 2024-2025 academic year. As of January 2025, the Virginia Board of Education has approved 15 total Lab Schools which will all be open Fall 2025. The Lab Schools initiative builds on Virginia's prior success over the past two decades with the Governor's Health Sciences Academies and the Governor's Science, Technology, Engineering, and Mathematics (STEM) Academies.

In 2022, Virginia Governor Glenn Youngkin proposed and championed the establishment of Virginia Lab Schools and the legislature appropriated \$100 million to support the Virginia College Partnership Laboratory fund. The original legislative authorization for the Lab Schools was established in 2010 for colleges and universities with teacher education programs, but no grant funds were allocated at that time and no application process was established. With the 2022 appropriations and legislative updates to the Lab School framework and (and an expanded pool of colleges, not just those with teacher education programs), Virginia has launched a new model to provide increased opportunities for the state's students.



### **Catalyst for Career-Connected Learning**

While Lab Schools can determine which grade levels they serve from Kindergarten through Grade 12, the legislation encourages colleges to design innovative programs. Building on the resources and expertise of the college launching the school, the initiative seeks to expand opportunities for K-12 students to gain exposure to workplace experiences and career pathways. Lab Schools are encouraged to partner with local industries early in the design process to create programs that directly prepare students for high-demand careers.

Many Lab Schools offer project-based learning opportunities outside of the typical classroom environment that address Virginia Standards of Learning. Other Lab Schools utilize year-round or extended day calendars to allow for flexibility and innovation beyond the traditional bell schedule.

Virginia's 15 approved College Partnership Laboratory Schools span elementary, middle, and high school levels, each designed to provide innovative educational experiences aligned with workforce needs. Of these, 12 Lab Schools have been approved to offer high school grades and are designed to connect students with industry-specific training and postsecondary opportunities. Some of them focus on a single, regionally-relevant field of study, others offer multiple degree paths.

For example, Germanna's Future Educators Academy partners with Laurel Ridge Community College, James Madison University, and local school districts to create an accelerated pathway to teacher licensure. The Academy will enable students to earn an associate degree in high school and complete a bachelor's degree in education in just two additional years. The Aerospace Academy of the Eastern Shore, opening Fall 2025 in the heart of Virginia's space corridor, is designed to prepare students for future careers related to space and technology. The school will provide two pathways for students to enter the aerospace workforce: (1) aerospace information and security systems, and (2) aerospace engineering. Old Dominion University will provide dual enrollment and specialized high school courses in aerospace engineering and data science. Business and industry partnerships include NASA, and local aerospace and technology companies that will provide work-based learning experiences and professional networking opportunities.



#### Local Governance and State Oversight

Virginia Lab Schools are public schools operated by higher education institutions that have autonomy over local governance and board representation. In addition to representatives from their founding higher education institutions, Lab School governing boards typically include district representatives, business leaders, and community stakeholders. The state strongly prioritizes industry involvement to support alignment with regional workforce needs.

Each school is required to maintain an open enrollment policy along with a transparent lottery process for when demand exceeds space available. Lab School enrollment is not limited to students named in partnership divisions and any student can apply to enroll in any Lab School statewide that fits their needs, interests, or future goals. This is unique in Virginia, which has only seven charter schools and limited school choice opportunities. The authorizing legislation defines a Lab School as a public, nonsectarian, nonreligious school established by a public or nonprofit institution of higher education.

The comprehensive application to establish a Lab School includes key elements such as the school's mission, academic program, enrollment procedures, governance structure, leadership, and financial plans. It must also demonstrate the institution's capacity to manage and execute the proposed vision, ensuring alignment with Virginia's educational standards and federal and state accountability measures. Once an application is approved, the Virginia Board of Education and the institution execute a 5 year contract with the college to launch and operate the school. The contract outlines performance expectations, operational responsibilities, and measures of success.

## SPOTLIGHT

## Building on a Strong Foundation of Science-focused Academies in Virginia

Virginia has two decades of experience establishing innovative high school models: the Governor's Science, Technology, Engineering, and Mathematics (STEM) Academies and Governor's Health Sciences Academies. Virginia launched the Governor's STEM Academies in 2007, with the initial planning supported by a \$500,000 grant from the National Governors Association to improve STEM education. Subsequent state funding and assistance enabled expansion to 21 Virginia Governor's STEM Academies in partnership with 39 school divisions.

Governor's STEM Academies are designed for the general student population and must be supported by partnerships consisting of public school divisions, postsecondary institutions, government, business, and industry. All STEM academies must offer at least two career pathways that include opportunities for students to earn industry credentials and postsecondary degrees, with at least one pathway aligned to statewide strategic growth fields and one addressing regional workforce demands.

The first Virginia Governor's Health Science Academy was established as a separate designation for schools in 2014. Virginia's nine Governor's Health Sciences Academies are similar to the STEM Academies, but have a specific focus on preparing students for health science careers. Each Governor's Health Sciences Academy implements at least five career pathways: Therapeutic Services, Diagnostic Services, Health Informatics, Support Services, and Biotechnology Research and Development.



#### **State Funding Support**

The Legislature's initial 2022 investment in the Lab Schools for the 2022-2023 budget biennium of \$100 million is designated for:

- \$5 million for planning grants of up to \$200,000 each to support colleges and universities in the design of new Lab Schools and to draft a Lab School application to the Board.
- \$20 million for initial start-up grants for approved Lab Schools to make one-time purchases for expenses necessary to launch a Lab School.
- \$75 million for per-pupil operating grants to support ongoing expenses for the operation and maintenance of a Lab School.

While schools may develop agreements with local K-12 divisions for allocations of per-pupil funding, this remains a local decision. The state funding serves as a seed investment to help establish Lab Schools while the host college determines how to secure long-term support from multiple sources. The design process focuses on sustainability outside of the General Fund so that Lab Schools can continue strong operations beyond the initial startup and 5 year contract.



### **Unique Program Components**

Virginia's Lab Schools stand out for their close partnerships with business and industry. These schools are established by postsecondary institutions and often operate on college or university campuses, offering students direct exposure to advanced educational opportunities and career paths. Each Lab School is designed to address the specific workforce needs of its region, with programs in fields such as maritime, healthcare, and aerospace. By leveraging the resources of higher education institutions and industry partners, Lab Schools prepare students for success in high-demand career sectors.

Virginia's Lab Schools have an opportunity to potentially set a new path for innovation in education, by providing higher education institutions the opportunity to directly manage K-12 schools. As Virginia continues to implement the Lab Schools initiative, the program remains in its early stages, with schools in various phases of development and refinement. With 15 approved schools spanning elementary, middle, and high school levels, the initiative is actively shaping its model, incorporating lessons learned from early implementation, and building partnerships to enhance career-connected learning opportunities for students across the state.

#### RESOURCES TO LEARN MORE

- Virginia Department of Education Laboratory Schools
- Virginia CTE Governor's STEM Academies
- <u>Virginia CTE Governor's</u> Health Science Academies

# SPREADING INNOVATION: LESSONS LEARNED AND RECOMMENDATIONS FOR STATE LEADERS

College and career readiness high school models provide state leaders a unique opportunity to **spur innovation** and unlock the full potential of effective approaches to bridging education and workforce needs. States utilizing a model schools strategy have created **dynamic approaches**—from collaborative governance structures to integrated funding models and industry partnerships—that foster deeper alignment between K-12 schools, colleges, and employers.

States play a crucial role in scaling innovation by leveraging strong programs developed at the local or regional level as exemplars. These schools can serve as vehicles for disseminating effective practices, resources, and information across the state, ensuring a broader reach and impact. By acting as facilitators, states can identify successful approaches and create frameworks to scale innovation. This can include providing technical assistance, offering funding incentives, or establishing statewide networks that enable collaboration and knowledge-sharing among districts, postsecondary institutions, and industry partners. Ultimately, states can use college and career readiness high school models to enhance workforce alignment, create access to advanced programs in regions without them, and elevate educational outcomes statewide.

#### **Cultivating collaboration in governance structures and operations**

**COLLABORATIVE GOVERNANCE MODELS:** College and career readiness high school models benefit from structures that provide a significant role for higher education institutions in their establishment and governance, as well as mechanisms for local employers to provide input into program offerings. States should encourage the development of collaborative governance boards that include representatives from each sector to ensure that educational programs align with workforce needs, industry standards, and college degree pathways, as demonstrated by Virginia's Lab Schools and Iowa's CTE Regional Centers.

**ROLE OF HIGHER EDUCATION:** Higher education institutions play a pivotal role in scaling up college and career readiness high school models, either by operating or serving as a key partner. When deeply engaged in operation or governance, higher education institutions are more likely to commit significant resources to its partner career academies and laboratory schools. This typically includes access to specialized equipment labs and facilities to support hands-on learning and extensive dual enrollment opportunities to all students in the school. These frequently lead to college certificates and degrees aligned with workforce needs, allowing high school students to make significant progress before graduation. Other resources provided by colleges and universities to partner schools include college and career advising, tutoring and mentoring, and a breadth and depth of faculty and courses typically unavailable to high school students.

**STATE OVERSIGHT:** In creating college and career readiness high school model designation criteria, approval processes, and oversight mechanisms, states need to balance a need to spur innovation while providing appropriate levels of oversight and accountability. Designation criteria should define expectations to reward quality implementation, and oversight mechanisms should differentiate based on the time needed for programs to mature. In the first few years after opening, monitoring should focus on initial implementation milestones and in later years on achieving student outcomes. States should minimize the burden on school reporting by building key variables into existing state data collection systems, and coordinating with other accountability mechanisms. The Technical College System of Georgia, for example, conducts recertification of Georgia's College and Career Academies every five years through the long-established school accreditation review process managed by AdvanceED rather than creating a separate career academy review process.

**STATE ROLE AS A CATALYST AND COORDINATOR:** Beyond oversight, states play a vital role as champions of local collaboration across K-12, higher education, and industry. By publicizing the initiative, convening stakeholders and providing technical assistance, state agencies can create a positive environment for establishing school models in communities across the state.

#### Incentivizing priorities in funding and sustainability

**START-UP AND OPERATIONAL FUNDING:** Providing initial state appropriations for the start-up phase of newly established high schools, along with mechanisms for sustained operational funding, is critical. State funding should cover both infrastructure and operational expenses, as seen in Virginia's grant fund for Lab Schools and Iowa's Career Academy Incentive Fund. This ensures schools have the resources to establish innovative programs and sustain them in the long term.

**PUBLIC-PRIVATE PARTNERSHIPS:** States should encourage or facilitate partnerships between schools, industries, and higher education to leverage additional resources. These partnerships can provide financial support and ensure that programs remain aligned with evolving workforce needs, as exemplified by the partnership models in Georgia and Iowa.

#### Codifying models in legislation and accountability

**LEGISLATIVE FRAMEWORK FOR INNOVATION:** States should establish legislative frameworks that promote the creation of college and career readiness high school models. This includes passing legislation that defines the structure, funding, and goals for these schools, as seen in North Carolina's Cooperative Innovative High Schools. Clear legislative guidance ensures consistency across regions and ensures longevity of the systems change.

DATA-DRIVEN DECISION-MAKING: States have strengthened accountability by requiring regular reporting of student outcomes and regional workforce alignment. Georgia's College and Career Academies, for example, must report annually on workforce-aligned program standards, student credential completion, and job placement rates. Similarly, North Carolina's CIHS programs track student performance in dual enrollment courses and postsecondary transitions to ensure program effectiveness.

**ENSURING CONTINUOUS IMPROVEMENT:** High-quality college and career readiness models evolve based on student performance data and labor market shifts. By leveraging statewide data systems, program reporting, and stakeholder feedback, states can refine these models to ensure they continue to meet the needs of students and employers.

#### **Reimagining student experiences and increasing access**

**REIMAGINED STUDENT EXPERIENCE:** Students participating in these models benefit from engaging, realworld learning experiences designed to bridge the gap between education and workforce demands. They experience coursework in unique ways beyond what they would in traditional high school experience. Students may earn credit through internships, work-based learning, and hands-on projects in highdemand fields. Sequences of dual enrollment courses aligned with certificates and degrees enable students to make progress toward their postsecondary goals while still in high school. Furthermore, learning on college campuses or at employer sites exposes students to cutting-edge technologies and professional environments, fostering a sense of belonging in these spaces early on.

WIDESPREAD ACCESS AND PARTICIPATION: States can target resources to prioritize establishing access to innovative programs in high-need communities across the state. Setting priorities for establishing model schools in underserved or economically distressed communities increases access to dual enrollment, work-based learning, and industry-aligned pathways to students and communities that will benefit the most from these programs. Open enrollment policies and transparent lottery systems, like those used in Virginia Lab Schools, help schools enroll representative student populations.

#### CONCLUSION

In an evolving world, preparing students for success requires more than traditional educational pathways. States that invest in college and career readiness high school models are leading the way in efforts to provide all students with high-quality, careerconnected learning that aligns with workforce needs. By supporting collaborative governance and sustainable funding, state leaders can lay a strong foundation for regional partnerships that serve students, communities, and industries alike.

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#### **About Accelerate ED**

Accelerate ED has brought together two dozen teams of regional stakeholders to design accelerated pathways leading to high-value degrees and careers in the local economy. These pathways enable high school students to take, at minimum, a semester of college courses related to a high-wage, in-demand career of their interest. Each team is coordinated by a regional intermediary that provides the backbone for coordination and scale. Teams went through a Blueprint design sprint to assess community needs, gather student and family voices, and design and plan a regional pathway strategy, setting a foundation for cross-sector coordination and trust that enabled the data collaborations described here. Accelerate ED is funded by the Gates Foundation and managed by Education Strategy Group.