THE JAMES G. MARTIN CENTER FOR ACADEMIC RENEWAL

POLICY BRIEF

Aligning Education with Work:

Why Employer Partnerships Are the Key to Effective Workforce Education in North Carolina

by: Jenna A. Robinson

EXECUTIVE SUMMARY

There is a persistent mismatch between North Carolina's higher education outputs and the state's workforce needs. In order to address this gap, policymakers must prioritize and incentivize ways for employers and institutions of higher education (IHEs) to work together, while also rewarding excellence in delivery and outcomes.

Employer-higher education partnerships offer the most effective, scalable path to a more vibrant, efficient economy. This policy brief explains the scope of the misalignment problem, the benefits of employer partnerships, and offers practical policy solutions.

THE PROBLEM: MISALIGNMENT BETWEEN HIGHER EDUCATION AND WORKFORCE NEEDS

State economic growth depends on employers' ability to fill positions with skilled workers. But doing so is becoming more difficult. According to the North Carolina Department of Commerce's 2024 Employer Needs Survey, 62 percent of employers report having difficulties in hiring.[1] The UNC System Workforce Alignment Report notes that North

1 North Carolina Department of Commerce, "2024 Employer Needs Survey Finds Fewer NC Businesses With Hiring Difficulties," *The LEAD Feed*, August 15, 2024, https://www.commerce.nc.gov/news/the-lead-feed/2024-employer-needs-survey-finds-fewer-nc-businesses-hiring-difficulties.

Carolina is "undersupplied for meeting future demand" in a large number of academic disciplines, broadly including business, computer science, education, engineering, and health professions.[2]

Only four percent of NCCCS's short-term programs will qualify for Workforce Pell grants.

Rapid technological change–particularly the spread of AI, automation, and advanced manufacturing– has exacerbated the misalignment between available jobs and current skills by accelerating demand for new competencies. Traditional degree pathways are often slow to adapt, a problem made worse when institutions design curricula without input from employers. Labor market signaling often lags employer needs, making it difficult for institutions of higher education to anticipate which programs should grow.

Demographic and economic trends also contribute to workforce shortages in key fields. According to the NCDHHS Division of Aging and Adult Services, roughly 20 percent of North Carolina residents are now older than 65.[3] Many are retired. Adding to the shrinking pipeline of workers, the birth rate fell during the 2008 "Great Recession" and never recovered. As a result, fewer students are entering the education and workforce pipeline today.

Together, these trends—the demographic cliff, an aging population, and misalignment between degrees and jobs—create significant workforce gaps.

THE CASE FOR EMPLOYER PARTNERSHIPS

The North Carolina Community College System predicts that only four percent of its current short-term programs will qualify for Workforce Pell grants.[4] Because eligibility depends on strict thresholds—including 70 percent completion and job placement rates—many North Carolina students who are seeking job-ready credentials will be unable to access the necessary funds. Partnerships between employers and IHEs are needed to close this gap.

Various types of employer partnerships already exist in North Carolina. They include:

- Co-designed programs with curriculum input from employers. One such program in North Carolina is the Golden LEAF Biomanufacturing Training and Education Center at NC State University, which has served students since 2007.
- Work-based learning, such as apprenticeships and internships. Wake Tech's 2025 BioMechatronics Apprenticeship, developed in cooperation with biotech partners CSL Seqiris, FUJIFILM Biotechnologies, and Eli Lilly, serves as a model.
- Full or partial tuition assistance from employers to employees for relevant/approved programs or continuing education. For example, Novant Health's *Future Forward* program, launched in 2025, pays up to $5,250 per year to help employees gain skills needed within the organization.

2 University of North Carolina System Board of Governors, "Policy on Academic Program Planning," *The UNC Policy Manual*, Policy 400.1, adopted May 23, 2024, https://www.northcarolina.edu/apps/bog/doc.php?id=68692&code=bog.

3 North Carolina Department of Health and Human Services, Division of Aging and Adult Services, *Community Resources and Connections*, April 1, 2020, https://www.ncdhhs.gov/division-aging-and-adult-services-booklet-1/open.

4 Analisa Sorrells Archer, "As NC Prepares for Workforce Pell, Only a Fraction of Short-Term Programs Are Expected to Qualify," *EducationNC*, February 11, 2026, https://www.ednc.org/as-nc-prepares-for-workforce-pell-only-a-fraction-of-short-term-programs-are-expected-to-qualify/.

Employer programs directly align with labor market demand and are more responsive than traditional programs.

- Public/Private partnerships, such as NC BioImpact, which partners with local employers, the UNC System, and the NC Community College System to produce biopharma manufacturing training programs.

These employer partnerships work to move students from school into the workforce. Because employers have specific knowledge of their industries' needs, employer programs directly align with labor market demand, are more responsive than traditional programs, and often integrate classroom learning with real-world applications.

Recent data on internships illustrate the importance of employer involvement. They show that "internship participation is strongly associated with lower underemployment after graduation. In fact, the odds of becoming underemployed after completing a bachelor's degree are 49 percent lower for students who reported having participated in an internship as part of their college education."[5]

Recent research on North Carolina apprenticeship programs tells the same story. A decade after graduation, apprentices earned more money and were 13 percent more likely to be employed than high school graduates who were otherwise similar before the program began.[6]

Now is the time to bolster such partnerships. North Carolina's 2026-27 budget provides funding for Propel NC, a new workforce-driven funding model that ties community college funding to student enrollment in programs aligned with high-demand, high-wage fields. The budget also provides additional funding for ApprenticeshipNC and other workforce priorities.[7] In order to allocate these funds most efficiently, additional employer-provided programs should be included in NCCCS' offerings.

A Strong Workforce Development Model: Carolina Battery Institute

Carolina Battery Institute (CBI) is a workforce training organization founded by North Carolina manufacturer Soelect Inc. in 2023, when the company faced difficulties finding skilled battery technicians. The new organization collaborates with industry and education leaders as "the nation's first lithium-ion battery manufacturing hands-on training program." The program is approved by the North Carolina Community College System (NCCCS) and delivered through the continuing education programs of various two-year colleges in the Piedmont area of North Carolina.

The program is affiliated with Guilford Technical Community College, Forsyth Technical Community College, and Rockingham Community College and has established 10 employer partnerships. It offers courses and runs registered apprenticeship and preapprenticeship programs for eight occupations, each leading to nationwide credentials. The strength of this model is its strong alignment between curriculum and job-ready skills.

5 Burning Glass Institute and Strada Institute for the Future of Work, *Talent Disrupted: College Graduates, Underemployment, and the Way Forward* (Philadelphia: Burning Glass Institute and Strada Institute for the Future of Work, February 2024), https://www.burningglassinstitute.org/s/Talent-Disrupted-03052024.pdf.

6 Jonathan Guarine, "Do Apprenticeships Pay Off? New Evidence for Recent High School Graduates," *The LEAD Feed*, North Carolina Department of Commerce, April 23, 2026, https://www.commerce.nc.gov/news/the-lead-feed/do-apprenticeships-pay-new-evidence-recent-high-school-graduates.

7 Hannah Vinueza McClellan, "2026 Budget Includes Funds for Propel NC, Enrollment Growth, and Workforce Programs for Community Colleges," *EducationNC*, July 2, 2026 (updated July 9, 2026), https://www.ednc.org/7-2-2026-budget-includes-funds-for-propel-nc-enrollment-growth-and-workforce-programs-for-community-colleges/.

BENEFITS OF EMPLOYER PARTNERSHIPS

Workforce development partnerships between employers and institutions of higher education yield benefits for students, employers, IHEs, and states.

According to 2023 research by the Strada Education Foundation, work-based learning yields significant results for students, including:

- Increased earnings after graduation
- Higher career satisfaction
- Greater confidence in succeeding in the job market
- Improved perceptions of the value of coursework

Strada reported, “Bachelor's degree holders who had a work-based learning experience report greater career satisfaction and are more likely to say their education helped them achieve their goals and was worth the cost.”[8]

Work-based learning also provides students with “earn-while-you-learn” opportunities and a reduced debt burden.

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And coursework well aligned with industry needs offers students clearer career pathways. Such credentials are often “stackable” and transferable, giving students many options after completion.

Employers also benefit from their partnerships with IHEs. Depending on the intensity of the employer involvement, these benefits can include the ability to customize talent pipelines; lower recruitment and onboarding costs; improved productivity and retention; and the ability to shape training to specific needs.

According to a U.S. Department of Labor-funded study conducted by the Urban Institute, "More than 90 percent of employers reported their apprenticeship programs led to improvements in their talent pipelines and increased employee loyalty."[9] Many firms use tuition benefits to recruit and retain workers and upskill their workforce.

Partnerships with employers also yield important benefits for colleges and universities. These include increased enrollment (mostly from adult learners), better connections with workforce experts, and improved employment outcomes (which can strengthen a program’s reputation). Moreover, workforce partnerships allow IHEs to diversify their revenue streams through employer-paid tuition, workforce contracts, and revenue-sharing arrangements. A report from the Center for Higher Education Policy and Practice finds:

> Employer partnerships benefit colleges and universities as well as students by increasing enrollment opportunities, improving curriculum relevance, strengthening graduate employment outcomes, and creating new sources of tuition revenue.[10]

8 Torpey-Saboe, Nichole, Eric Leigh, and Ashley Clayton. *The Power of Work-Based Learning*. Strada Education Foundation, 2023.

9 Daniel Kuehn, John Marotta, Myca San Miguel, and Robert I. Lerman, *Beyond Productivity: How Employers Gain More from Apprenticeship: Findings from the American Apprenticeship Initiative Evaluation* (Washington, DC: Urban Institute, October 26, 2022), https://www.urban.org/research/publication/beyond-productivity-how-employers-gain-more-apprenticeship.

10 Center for Higher Education Policy and Practice, *Unpacking Workforce Partnerships: Improving Structures for Learners* (Manchester, NH: Center for Higher Education Policy and Practice, July 2024), https://www.chepp.org/wp-content/uploads/2024/07/CHEPP_WORKFORCE-PARTNERSHIPS_WHITE-PAPER_fv-FINAL.pdf.

Funding models that reward activity rather than outcomes often direct funds to unproductive programs.

Such arrangements also benefit state and local governments, especially through more efficient use of public higher-education funding. New programs created or sponsored by employers or funded through revenue-sharing don't require additional public appropriations. They also reduce skill mismatches and contribute to economic development. Such programs can "help states and regions become more competitive."[11]

POLICY BARRIERS TO EFFECTIVE PARTNERSHIPS

Significant regulatory and logistical barriers prevent employers and IHEs from creating new partnerships.

At the federal level, accreditation and regulatory rigidity are both barriers to innovation, often impeding the swift changes IHEs need to keep pace with workforce demands. Workforce Pell's strict eligibility rules, which exclude most of the state's short-term programs, illustrate the cost of such rigidity. Although four national accreditors are now working together to "accelerate support for workforce education,"[12] significant barriers still exist.

Moreover, funding models that reward instructional activity rather than outcomes often direct funds to unproductive programs. Under such a model, faculty and departmental priorities often determine which courses and programs are available, regardless of whether they align with workforce needs. North Carolina recently addressed this barrier by adopting Propel NC.

Regulatory uncertainty surrounding revenue sharing can also act as a barrier to establishing certain types of workforce partnerships. Revenue sharing is permitted by 2011 guidance issued by the Department of Education under President Obama. However, in 2023, the Biden administration considered changes. Following significant criticism from across the higher education sector, the Department never implemented any changes, and the Education Department released additional guidance in January 2025, confirming that current statutes permit universities to enter into revenue share agreements with third parties. Despite that additional guidance, some uncertainty remains.

Faculty governance also creates inertia, making it difficult to realign courses rapidly as the market changes. The Boston Consulting Group also found that the different cultures and structures of IHEs and employers make it difficult to establish partnerships. "Higher-ed institutions and employers often speak different languages around timelines, urgency, structure, and governance. In some cases, they may point fingers at each other over who is responsible for the talent gaps."[13]

11 Sacha Litman, Lane McBride, Tejus Kothari, Claudia Newman-Martin, Ruth Ebeling, and Frank Breitling, "How Higher Ed and Employers Can Partner to Power Talent Pipelines," *Boston Consulting Group*, October 19, 2022, https://www.bcg.com/publications/2022/bridging-the-talent-gap-by-partnering-with-higher-ed-institutions.

12 Middle States Commission on Higher Education, "Four National Accreditors Unite to Accelerate Support for Workforce Education and State Economic Development," February 27, 2026, https://www.msche.org/2026/02/27/four-national-accreditors-unite-to-accelerate-support-for-workforce-education-and-state-economic-development/.

13 Sacha Litman, Lane McBride, Tejus Kothari, Claudia Newman-Martin, Ruth Ebeling, and Frank Breitling, "How Higher Ed and Employers Can Partner to Power Talent Pipelines," *Boston Consulting Group*, October 19, 2022, https://www.bcg.com/publications/2022/bridging-the-talent-gap-by-partnering-with-higher-ed-institutions.

POLICY SOLUTIONS: HOW STATES CAN ENCOURAGE EMPLOYER PARTNERSHIPS

North Carolina should make employer partnerships a significant part of workforce education. Employers and IHEs must work closely together to design, deliver, and evaluate career-focused education programs.

To support workforce partnerships in the states, Congress should codify the 2011 “bundled services” guidance into law.

Key Recommendations

For North Carolina:

- **Alignment of funding and incentives:** This could include tying funding to employment outcomes or demand (e.g., Propel NC[14]), providing matching grants for employer-IHE partnerships, or other incentives for employer-sponsored education. The UNC System should continue to incorporate workforce alignment and ROI in academic program review.
- **Increased transparency:** North Carolina public IHEs should regularly report program-level outcomes, including earnings and employment rates.
- **Increased regulatory flexibility:** Examples include streamlined approval for employer-aligned programs and flexibility in credential design.
- **Support for Work-Based Learning:** This could include financial support/incentives or revenue sharing for employer-provided training, as well as administrative simplification for employers.

For Federal Policymakers:

- In order to support workforce partnerships in the states, Congress should codify the 2011 “bundled services” guidance[15] into law. Such provisions were included in the 2024 College Cost Reduction Act,[16] sponsored by Rep. Virginia Foxx (R-NC-5).

14 North Carolina Community College System, “Propel NC: A Workforce-Driven Business Model for North Carolina’s Future,” accessed July 14, 2026, https://www.nccommunitycolleges.edu/college-faculty-staff/academics/propel-nc-a-workforce-driven-business-model-for-north-carolinas-future/.

15 U.S. Department of Education. “Dear Colleague Letter GEN-11-05: Subject: Implementation of Program Integrity Regulations.” March 17, 2011. Accessed Jun 29, 2026. https://fsapartners.ed.gov/knowledge-center/library/dear-colleague-letters/2011-03-17/gen-11-05-subjectimplementation-program-integrity-regulations.

16 U.S. Congress, House, *College Cost Reduction Act*, H.R. 6951, 118th Cong., introduced January 11, 2024, https://www.congress.gov/bill/118th-congress/house-bill/6951.

This model incentivizes public-private partnerships and rewards excellence in delivery.

The Ohio Model

A recently introduced Ohio bill serves as a useful model for North Carolina. Ohio's Senate Bill 462, the Joining-Opportunities Businesses and Schools (JOBS) Act, "creates Qualified Education Partnerships (QEPs) between accredited Institutions of Higher Education (IHEs) and private sector employers."[17]

Ohio State Senator Jane Timken, the bill's sponsor, explained its benefits: "This legislation will close the gap between educational institutions and employers. By allowing educational institutions and employers to partake in Qualified Education Partnerships, we can ensure Ohio's students have the skills needed to live, work, and thrive in our great state."[18]

This model combines two complementary approaches: It incentivizes public-private partnerships and rewards excellence in delivery. The bill incentivizes employer participation by offering state tax credits to employers that enter into QEPs that produce a "recognized post-secondary degree or credential that is valuable in the broader labor market, portable, and credit-worthy."[19] To qualify, employers must meet standards established by the state. By keeping standards high, the bill encourages long-term partnerships. Agreements between employers and IHEs may include curriculum development, internships, apprenticeships, equipment donations, and revenue-sharing arrangements that align the interests of IHEs and employers.

CONCLUSION

Employer partnerships are the key to realigning workforce needs with higher education outputs. Policymakers have the opportunity to catalyze such partnerships through deregulation, better incentives, and increased transparency measures. With smart policy solutions, North Carolina's economy will remain vibrant and efficient.

17 Jane M. Timken, "Timken Introduces JOBS Act," *Ohio Senate News*, June 30, 2026, https://ohiosenate.gov/members/jane-m-timken/news/timken-introduces-jobs-act.

18 ibid.

19 Ohio Senate, *Enact the Joining-Opportunities Business and Schools (JOBS) Act*, S.B. 462, 136th Gen. Assemb., as introduced, June 25, 2026, https://search-prod.lis.state.oh.us/api/v2/general_assembly_136/legislation/sb462/00_IN/pdf/.

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About the Martin Center

The James G. Martin Center for Academic Renewal is a private nonprofit institute dedicated to improving higher education policy. Our mission is to renew and fulfill the promise of higher education in North Carolina and across the country.

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