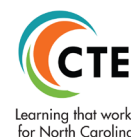




TAKING ACTION: CREATING THE TALENT PIPELINE OF THE FUTURE



Regional Alliances Yield Education-to-Career Pathways



Fayetteville Technical Community College Draft Days



Lenoir Community College
Manufacturing Employer Engagement

“Regional collaboration is difficult and requires time, energy and resources. At the state level, we provided tangible incentives through leadership grants to community colleges willing to bridge efforts within their regions and develop models of collaboration and cooperation resulting in effective career pathways aligned with their local needs.”

- Robert J. Witchger, Ed.D.
Director, Career and Technical
Education
NC Community College System

NC COMMUNITY COLLEGES

Through a collaborative, two-year leadership initiative, community colleges across North Carolina are implementing critically needed career pathways aligned with employer and labor market demand to ensure a high-quality talent pool for North Carolina employers and successful careers for graduates.

Effective partnership models are emerging, and community colleges are learning from each other what works and what needs improvement as they build regional alliances with employers, workforce development boards, K-12 school districts, and community organizations.

The leadership initiative set forth requirements, including that employers be brought to the table first to share their needs and to be integral players in the design and creation of the pathways. “The key to success is involving employers from the beginning,” said Dr. Bob Witchger, one of the initiative’s architects and state director of Career and Technical Education (CTE) at the NC Community College System. “Too often in the past, employers were brought in after the design work was complete, to ‘rubber-stamp’ the effort. That approach hasn’t

worked. To be effective, employers must be integrated from the beginning.”

“Successful preparation for the new economy requires more than a high school diploma,” said Jo Anne Honeycutt, state director of CTE at the NC Department of Public Instruction. “Students must think about career pathways early and often. Educators and employers working together can collectively build pathways that both fill an economic need for employers and prepare students for success in good jobs.”

The leadership initiative, funded with \$1.5 million through the Carl D. Perkins Career and Technical Education Act, provided 20 two-year grants of \$70,000 to community colleges that successfully created effective regional alliances. The 20 community colleges and their partners met periodically through the two-year period to share successes, lessons learned, and to encourage each other as they addressed challenges and roadblocks.

Major components of these initiatives include employer engagement, pathways programs of study, career advising, and work-based learning.

EMPLOYER ENGAGEMENT

Engaging employers early and often in the design and implementation process is key to ensuring pathways align to industry and local labor market needs. Successful pathways secure upfront commitment from business and industry in the occupational sector and support determination of skills requirements for employment and career progression in high-demand occupations. Employers provide career advising and work-based learning experiences throughout the pathway and support faculty with strategies to integrate theory and practice into skills development in the classroom and on the job. Examples from model alliances include:

- **Cummins Engine in Rocky Mount** partners with both **Edgecombe Community College** and **Nash Community College**. Not only do they participate in every event, including providing plant tours and plant events from middle school on up, but they help encourage other employers to engage as well.



- **Central Carolina Community College's BRAT** (Business Retention and Acquisition Team) centralizes employer outreach to key team members who know the employers personally, speak their language and keep connections strong. Employers provide apprenticeships, career advising, internships, hands-on training and job shadowing.



- **Brunswick Community College's** key strength is engaging employers and focusing on jobs and job training. Employers are viewed as customers, and students as the college's product. Graduates with Associate degrees are required to complete a 320-hour internship. Internships often lead directly to jobs, with graduates in jobs in



nine different states. Several employers indicated an issue with scheduling, so the college instituted hybrid courses, with students only on campus two afternoons a week, freeing them to schedule easily with employers. The college hosts a Pro Day where industry professionals earn recertification credits with students embedded in their groups.

SPOTLIGHT

Fayetteville Technical Community College

Fayetteville Tech through its Collision Repair and Refinishing Technology program involves industry from the ground up. The head of the program, Paul Gage, came from industry and worked with employers to design and build the program. "If we build what we think industry wants, they probably won't come," Gage explains. "But if you bring them to the table and have them build it, then they will come."



PATHWAYS PROGRAMS OF STUDY

Programs of study build in academic and technical competencies, postsecondary certificates and credit, diplomas and degrees. The full range of education strategies is clearly articulated from one level of instruction to the next, including articulated course credit through the NC High School to Community College Articulation Agreement and locally developed agreements.

Programs are mapped to labor market needs, with work-based learning opportunities integrated in the program. Credentials are recognized by education and industry. Examples from model alliances include:

- Regional articulation is in place for six career pathways at **Asheville-Buncombe Technical Community College** (AB Tech) with 15 industry partners. Pathways (9-14 programs of study) include Computer-Aided Drafting (certificate), Computer-Integrated Machining (certificate), Mechanical Engineering Technology (AAS), Welding (certificate; two pathways), and Manufacturing and Maintenance Engineering (certificate, with all credits applied toward either Mechanical Engineering or Industrial Systems).



- Carteret Community College** established new, collaborative relationships with Carteret County Schools, working with public school CTE and industry representatives to develop or revise 23 Career and College Promise (CCP) Programs of Study. Articulated credit was optimized, and program hours reviewed to foster progression and completion. Pathways documents were created to map progression from high school to certificate/diploma/degree completion.
- A newly designed online portal, called MyHCConline.com, supports high school counselors and students in navigating **Haywood Community College's** Automotive Systems Technology career pathway.

SPOTLIGHT

Pamlico Community College

In developing its initial career pathways, **Pamlico Community College** focuses on community need, creating two CCP pathways with stackable credentials, working toward an Associate degree. In designing the pathways, overlap with transfer pathways is intentionally established so classes can be shared, potentially leading to students completing both. Initial pathways include Human Services Technology and Substance Abuse Intervention, responding to labor market demand in the area of human services as well as community need in addressing serious addiction issues in the area. Twelve certificates were awarded in spring 2016 in the two pathways.



Leadership Community Colleges

- Asheville-Buncombe Technical Community College
- Brunswick Community College
- Caldwell Community College & Technical Institute
- Carteret Community College
- Catawba Valley Community College
- Central Carolina Community College
- Central Piedmont Community College
- Durham Technical Community College
- Edgecombe Community College
- Fayetteville Technical Community College



- Halifax Community College
- Haywood Community College
- Lenoir Community College
- Nash Community College
- Pamlico Community College

- Piedmont Community College
- Roanoke-Chowan Community College
- Rockingham Community College
- Rowan-Cabarrus Community College
- Vance-Granville Community College

CAREER ADVISING

A comprehensive career advising system with wraparound support services is essential to successful career pathway initiatives, with support and advising occurring at all points along the pathway and leading up to the pathway. Students need labor market information and knowledge of skills required so they can make good decisions about the pathway that meets their individual needs and the needs of the labor market. Examples include:

- Industry professionals serving as mentors for students at **Fayetteville Tech's** Collision Repair and Refinishing

Technology program. **Fayetteville Tech** trains the industry mentors so they are prepared and equipped to be effective mentors for students.

- **Durham Technical Community College** created a start-up high school for eighth graders transitioning to ninth grade, an intensive approach to train students in work-ready skills.
- High-tech, high-touch camps enable students to experience **Central Carolina Community College's** labs and learn more about opportunities.

Why Career Pathways?

» **Most high school students feel unprepared** for college and career. According to a multi-year *College and Career Readiness* survey of 165,000 high school students conducted by YouthTruth, a California-based nonprofit, only 45 percent of students feel prepared. (YouthTruth, 2015)

» **By 2020, 65 percent of all jobs** will require postsecondary education and training beyond high school. On the country's current track, we will face a gap of five million trained workers. (Georgetown University Center on Education and the Workforce)

» **To lead in a global economy,** US employers need the best and brightest, trained and ready for successful careers.

» **Trends point to a gap** between the skills employers want and the skills candidates offer. (Business Insider, May 2016)

» **To close the gap,** career pathways aligned with employer need are critical to provide employers with the talent they need and to equip graduates with skills to succeed in the workplace and in satisfying careers.

SPOTLIGHT

Asheville-Buncombe Technical Community College (AB Tech)

At **AB Tech** through its RAMP (Raising Awareness of Manufacturing Possibilities) initiative, high school teachers and counselors complete two days of professional development to raise their awareness of opportunities in manufacturing. Training includes information about specific programs, interaction with a panel of manufacturing employees, and tours of two local manufacturing facilities. Multiple visits are made to high school

CTE classes, and students tour **AB Tech** facilities and manufacturing plants, sometimes with their parents. Eighth graders learn about the initiative as well, and the NCCareers.org resource supports career advising efforts. A RAMP scholarship program also encourages enrollment and awareness.



WORK-BASED LEARNING

Work-based learning provides valuable insights into the workplace environment, including standards, processes, competencies, and culture. Opportunities for work-based learning are integrated into the 9-14 program of study to support classroom instruction, enhance skills development, and teach foundational workplace skills. Work-based learning is designed to enable students to explore, experience and engage in real-world work environments and gain work-readiness skills. Examples from model alliances include:



- Through a collaborative YouthWork Internship Program in Durham, 300 youth benefit from a summer internship. Students apply for internships, interview, and link their internship with work-readiness skills. The partnership effort operates through **Durham Technical Community College**, Made in Durham (intermediary), the City of Durham, Durham County, Durham Workforce Development Board, My Brothers Keeper, and the Raleigh-Durham Electrical Joint Apprenticeship Training Council.
- All students in **Rowan-Cabarrus Community College's** Health Science Career Pathways progress through clinical rotations, experiencing all types of area health care facilities (e.g., hospitals, nursing homes, physician offices). In addition to the clinical experiences, they job shadow and experience field trips and internships.
- The Harper Campus of **Central Piedmont Community College** offers a variety of work-based learning experiences through area employers, including 30 co-op positions with Duke Energy.

SPOTLIGHT

Central Carolina Community College

Through the **Central Carolina** Apprenticeship Works program, a wide variety of work-based learning opportunities are integrated into the pathways: apprenticeships, internships, job shadowing, service learning, industry tours, hands-on classroom training, and innovative discussions with industry leaders through advisory boards. One challenge observed was ensuring that students were fully equipped and prepared for success in their apprenticeships. As a result, a four-day orientation to apprenticeships is now offered the semester before the apprenticeship begins to ensure students are ready to take full

advantage of their apprenticeship and meet or exceed the expectations of their employer.



What is Work-Based Learning in NC?

EXPLORE	EXPERIENCE	ENGAGE
<i>Exploring Work</i>	<i>Fundamental/ Soft Skills</i>	<i>Classroom Learning Applied on the Job</i>
» Job shadowing	» Volunteer work	» Structured volunteer work
» Employer videos	» Part-time work	» Structured service learning
» Employer projects in classroom	» Service learning	» Cooperative education
» Industry tours	» Entrepreneurial experiences	» Internship
» Field trips	» Merit badges	» Apprenticeship
» Junior Achievement	» Junior Achievement	
	» School-based enterprises	
	» Internship	

CERTIFIED CAREER PATHWAYS

The work of these 20 model, regional alliances are jumpstarting their regions' ability to offer NCWorks Certified Career Pathways for youth and adults, ensuring that students have access to the best education, training, and work-based learning opportunities as they pursue careers in high-demand occupations. Certified pathways are endorsed by the NC Division of Workforce Solutions, making them eligible for targeted grant funds.

The criteria for certification is similar to the requirements to apply for the two-year leadership funding through the NC Community College System and includes: employer-demand driven, employer engagement, collaborative partnerships, career awareness, articulation and coordination, work-based learning, multiple points of entry and exit, and evaluation. Teams apply to the NCWorks Commission for certification.



KEY ELEMENTS OF CAREER PATHWAYS

1. *Build cross-agency partnerships and clarify roles*
2. *Identify industry sectors and engage employers*
3. *Design education and training programs*
4. *Identify funding needs and sources*
5. *Align policies and programs at the state and local levels*
6. *Measure system change and performance*

(Source: *Career Pathways Toolkit: A Guide for System Development*, US Department of Labor, 2015)

Career Pathways – Defined

According to the US Workforce Innovation and Opportunity Act (WIOA), the term “career pathway” means a combination of rigorous and high-quality education, training and other services that:

- *aligns with the skill needs of industry in the state or region;*
- *prepares an individual for success in a full range of secondary and postsecondary education options, including apprenticeships;*
- *includes counseling to support the individual in achieving education and career goals;*
- *includes, as appropriate, education offered concurrently with and in the same context as workforce preparation activities and training for specific occupations or occupational cluster;*
- *organizes education, training, and other services to meet individual needs in accelerating educational and career advancement;*
- *enables individuals to attain a secondary school diploma (or its recognized equivalent) and at least one recognized postsecondary credential; and*
- *helps individuals enter and/or advance within a specific occupation or occupational cluster.*

(Source: *Career Pathways Toolkit: A Guide for System Development*, US Department of Labor, 2015)

Lessons Learned

Strategies to Engage Employers

- *Speak their language. Education words put up a wall.*
- *Face-to-face communication is important, but keep the face they see consistent.*
- *Engage with the CEO, owner and/or executive leaders whenever possible. They are the decision-makers. Let them drive the pathway.*
- *Understand the industry need; work with industry to create the solution; be a business partner.*
- *Show genuine interest in their company; build trust; let them know you are there for them. Beware of preconceived notions or past baggage from earlier efforts.*
- *Look like the business you wish to serve. Look at, comment on, and replicate equipment they use.*
- *Provide opportunity to network at job/career fairs – opportunity to talk with students and faculty/administrators.*
- *Schedule advisory boards and other meetings when convenient for employers.*
- *Emphasize your outcome is a good employee for them. Be clear about their return on investment (ROI).*
- *Get involved in specific associations in which they are members. Go where they are.*
- *Work together to set clear expectations – for the employer, high school, college and student.*
- *Follow up; check in; ask what's working and what's not working. Show them you are working to meet their needs.*
- *Start small; accept a foot in the door (like job shadowing and mentoring). Take what they will give you and recognize it will grow from there.*
- *Recognize and address key barriers for the industry (e.g., confidentiality, age restrictions on plant floors). Seek solutions together to remove or mitigate barriers.*
- *Prepare students for experiences with employers. Spend time helping them prepare questions in advance. Introduce them to expectations in the workplace.*
- *Offer training to employers to help them prepare employees to work with students, building trust and opening doors.*



Nash Community College Parent Night

Lessons Learned

Pathways Programs of Study

- Launch collaborations well. Bring together employers, high school and college faculty to build and align curriculum to meet industry needs.
- Build pathways together; meet regularly; build trusting relationships.
- Collaborate on local articulated-course development.
- Listen to employers and align technical courses to meet their needs. Encourage college faculty to return to industry to develop updated curriculum.
- Leverage industry professionals to stress the culture of work and development of foundational work skills in the classroom.
- Develop pathways that include many different levels, reflecting the entire employment sector (e.g., student begins as a welder and then progresses to become an engineering technician).
- Hold summits, like counselor summits, to discuss common issues and seek solutions to challenges and barriers.
- Include high school teachers/ counselors in employer and parent activities. Invite them to advisory board meetings.
- Build ongoing interaction across college and high school; go to them and let them come to you (e.g., faculty share days).



Halifax Community College Career Advising

Lessons Learned

Career Advising

- Leverage career coaches and career development coordinators to build partnerships and enhance career advising.
- Integrate career interest inventories and classroom presentations.
- Get community college students in front of middle and high school students – strong leadership development for college students and college/career awareness for middle and high schoolers.
- Partner with others to provide summer camps for middle and high school students.
- Use STEM tours, industry tours, CTE showcases to spark interest.
- Leverage college department chairs and deans in career advising and curriculum alignment.
- Host industry sessions for counselors and teachers.
- Conduct joint professional development for career advisors, including those from schools, colleges, and career centers. Include information on how to select proper assessments, share labor market information, and communicate multiple entry-exit points in pathways.
- Leverage workforce development board business-industry representatives who know and understand industry in the region.
- Bring industry professionals to schools and colleges to work with students and take students to employer sites; ongoing interaction.
- Include service learning as a form of work-based learning.
- Create opportunities for “speed networking” among students and employers as well as faculty and employers.

For more information, contact:

North Carolina Community College System
200 West Jones Street, Raleigh, NC 27603-1379
5016 Mail Service Center, Raleigh, NC 27699-5016

www.nccommunitycolleges.edu

Robert J. Witchger, Ed.D.
Director, Career and Technical Education
witchgerb@nccommunitycolleges.edu



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