

Building Career Pathways: The Impact of Stackable Credentials in North Carolina Community Colleges

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Abstract

North Carolina Community Colleges use stackable credentials to improve student recruitment and retention by offering pathways to certificates, diplomas, and associate degrees that align with workforce needs. These credentials provide flexible, job-ready options that support diverse learners and career advancement. Faculty from Nash Community College (NCC), Pitt Community College (PCC), and Wake Technical Community College (Wake Tech) also presented insights on program design, advising, and challenges at the 2024 North Carolina Community College System (NCCS) Conference.

Keywords: Stackable credentials, community colleges, workforce development, credential attainment, adult learners, educational partnerships

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North Carolina Community Colleges use stackable credentials to build skills and advance toward higher-level qualifications. These pathways, from certificates to diplomas and associate degrees, help students acquire job-ready skills in a shorter timeframe (U.S. Department of Education, 2021; North Carolina Network for Excellence in Teaching, 2021; Bozick et al., 2021; Austin et al., 2012). Bozick et al., (2021) states that this model offers flexibility and versatility for learners, and a structured pathway for career and educational advancement. It supports diverse learners by allowing them to complete certificates in manageable stages, at their own pace, and

enables career progression through promotions and higher wages (Austin et al., 2012).

The U. S. Department of Education (2021) identified several areas where stackable credentials are effective, including workforce shortages, low program enrollment, and students leaving before completing degrees. These credentials address skill gaps and support students balancing academic challenges with work and family responsibilities (Bozick et al., 2021).

Daugherty et al., (2023) found that low-income individuals who earned certificates were more likely to complete multiple-stacked credentials, increasing their earnings and narrowing the income gap, suggesting stackable credentials may promote equity.

Expanding stackable credentials presents challenges, such as shortages and limited industry engagement (Daugherty et al., (2023). Strengthening industry partnerships can ensure programs meet employment needs, offering students industry-recognized credentials and experience while maintaining academic momentum Giani and Fox (2016).

Faculty design and implement stackable credentials to meet workforce needs and collaborate with student services on advising. Drawing from their experiences, faculty from the Physical Therapy Assistant (NCC), Health Information Technology (PCC), and Computer Information Technology Service and Support (Wake Tech) programs shared their insights on aligning stackable credentials with workforce needs and collaborating with student services. Given faculty's responsibility in developing and promoting stackable credentials, it is valuable to examine how these programs are implemented at specific institutions, which vary in size and location, from rural to urban locations and mid-size to large enrollments.

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Nash Community College: Creating Flexible Career Pathways

Advising Strategies for Stackable Credentials

NCC, located in Rocky Mount, North Carolina, serves an enrollment of 6,506 students in both curriculum and continuing education (North Carolina Community College System, 2024, Fall). The college has embraced the need to provide students with educational opportunities that emphasize job readiness. A key focus is offering degree pathways that include stackable credentials and certificates, which align with entry-level employment needs.

Current students are looking for flexibility and availability for their education, as well as a path toward career progression. The ability for students to stack credentials provides a clear pathway toward career advancement. At NCC, this starts with providing a customized educational experience for the students in which career needs are emphasized.

The customized experience begins with advisors identifying students' career goals and tailoring class selection for a modular learning experience. During the advising process it is important to identify career needs for credential attainment and align class selection with these pathways. Placing students on career pathways allows advisors to connect educational goals with employment trends, ensuring efficient class selection and sustained interest.

Industry Partnerships for Stackable Credentials

To accurately advise students, it is imperative that the educational institution maintains an understanding of the local industry trends and needs. This understanding is strengthened through industry partnerships, which provides valuable insights into current and future job market demands. Additionally, advisors should discuss the financial impact of a stackable degree pathway. The financial burden for students within the community college system can be a significant barrier to degree attainment. Promoting a stackable educational experience allows students an option to ease the financial strain. Industry partnerships can also offer financial support and resources to help with the financial burden.

Health Sciences Stackable Credentials

Additionally, the NCC Health Sciences Department emphasizes the importance of prospective students earning stackable credentials as they work toward their ultimate degrees. The program aims to create dedicated pathways for each of the health sciences disciplines, clearly outlining the steps for indi-

vidual credential attainment. For example, in the NCC nursing program, students can earn various certifications such as a Certified Nursing Assistant (CNA) license, medication aide certification, or a practical nursing (PN) diploma before entering the associate's degree program.

The importance of job-ready credentialing for students correlates directly with the mission of the local community college of providing career pathways to the local community. NCC has embraced the mission of "meeting students where they are" in their educational pathway (Nash News, 2024, January 24). To meet this mission statement, it is imperative that students are positioned to complete educational pathways which have a direct correlation to a job-ready skill.

Pitt Community College (PCC): Expanding Stackable Credential Opportunities

Health Sciences Scholars Program

PCC, located in Winterville, North Carolina, serves 11,638 curriculum and continuing education students (North Carolina Community College System, 2024, Fall) and focuses on "educating and empowering people for success" (Pitt Community College, n.d.). Its Health Sciences Division offers early training and stackable credentials for high school juniors and seniors. Courses are offered in a hybrid format, with classes held at Pitt County Schools and PCC in cohorts. Students receive individualized advising from an advisor. Courses are free, including tuition, books, and transportation to and from their high school, based upon an agreement between the two school institutions. Students must meet GPA criteria, complete an application, and interview to receive priority enrollment in health sciences programs. The first cohort started in Fall 2023 with 18 students, and 10 students will begin their health sciences programs in Fall 2025.

BioWork Program - Supporting Adult Learners

PCC's BioWork program supports adult learners and is vital to Pitt County's workforce; given the presence of major pharmaceutical and biotech companies in Greenville, North Carolina. The 153-hour course trains students in process technician skills for biotech, pharmaceutical, or chemical manufacturing, covering job search, resume preparation, and interviewing. It is offered as a hybrid program with online lectures and in-person labs. These courses are transferable to curriculum programs, which offer a

degree and/or credentials. There are scholarships available, and some companies may cover tuition costs. Students may receive additional money for successful completion. While this program began decades ago, it was redesigned in 2020 and has served 141 students since that time. Of that enrollment, 121 have completed with an 86% success rate (C. Weeks, personal communication, November 2024).

2+2 and Articulation Agreements

Many campus programs have a 2+2 or articulation agreements with four-year colleges/universities. Within health sciences, Health Information Technology (HIT) was the first to offer such an agreement. These students receive one-on-one advising based on articulation agreements between PCC and East Carolina University (ECU). ECU recognizes 60 credits from PCC and students enter as a junior in the Health Informatics and Information Management (HIIM) program, which is a tremendous cost savings. Admission is competitive but HIT graduates with a Registered Health Information Technician (RHIT) credential receive extra points. The current HIM Program Coordinator commented that since its inception in 2018, 24 PCC students have been accepted into ECU's HIIM's program through this process.

Advanced Medical Coding Program - Challenges and Adaptations

While many credential options succeeded, some required restructuring, like the Advanced Medical Coding program. It was initiated by employers and advisory board members to ensure coders were job-ready with minimal additional training. Some prerequisites were barriers, so they were removed. Due to low enrollment, the program transitioned to continuing education with open enrollment. The disadvantage is students will not receive a credential; however, there were some advantages. Health Sciences was able to collaborate with the Business Division and Continuing Education (CE) to offer an alternative. The Business Division teaches medical terminology and outpatient coding courses while HIT focuses on inpatient coding courses. It was a win for both divisions and the students. An added incentive allows students to transfer the CE medical coding courses to the curriculum HIT program, in which graduates may be eligible for the RHIT credential, making them marketable. Since this is a new initiative, no data has been collected to show an increase in transfer students to the HIT program.

As the economy is dependent on education and skills of its workers, "jobs requiring an associate degree will grow faster than those requiring no college experience" (Cohen et al., 2014, p. 323). This highlights the importance that people should "commit to higher education and career training" (Cohen et al., 2014, p. 323). PCC supports this by offering and leading in these efforts through stackable credential options.

Wake Technical Community College - Strengthening Career and College Pathways Career and College Promise (CCP) Initiatives

Wake Tech maintains a strong Career and College Promise (CCP) presence, offering high school students a wide range of pathways to achieve their educational and career goals. Wake Tech, located in Raleigh, North Carolina, serves 41,125 curriculum and continuing education students (North Carolina Community College, 2024, Fall). Wake Tech currently provides 6 college transfer pathways (CTP) and 41 Career and Technical Education Pathways (CTE) spanning 7 major disciplines: Biotechnologies, Engineering, Business and Professional Services, Health Sciences, Information Technology, Public Safety, and Transportation. The college focuses on retention and completion by offering stackable credentials, with advisors helping students to build on achievements and progress toward advanced certificates or degrees (Wake Technical Community College, 2024).

Early College Opportunities

Wake Tech provides multiple avenues for high school students to participate in its CCP program, including Early College options, Workforce and Continuing Education (WCE) and University Partnerships. Students can access CCP through innovative programs like the Vernon Malone College and Career Academy, Wake Early College of Information and Biotechnologies (WECIB), and Wake County Schools' Cisco Academy. High School students can earn certificates through Workforce and Continuing Education (WCE) that are eligible for credit toward CCP pathways. Additionally, University Partnerships enable students to transition smoothly from CCP to an Associate in Applied Science (AAS) degree and, if desired, to a four-year university (NCCCS, 2025).

Wake Tech's commitment to student success is evident in Fall 2022: 197 unduplicated CTE students, 7 earning credentials, 66 students matriculat-

ed to an associate's degree program. The Information Technology (IT) program saw 244 students in 11 pathways (Nicholson, 2024, November).

University Partnerships for Seamless Transitions

Through partnerships, Wake Tech prepares students for success. By promoting stackable credentials, it helps them earn higher-level certificates and degrees, enhancing employability and career goals. Wake Tech anticipates continued growth in CCP participation, as noted in the Effectiveness and Innovation Division's November 2024 report (Nicholson, 2024, November).

Conclusion

Stackable credentials have strengthened North Carolina Community Colleges by bridging education and workforce demands. These programs offer students structured, flexible pathways to career advancement. The experiences shared by NCC, PCC, and Wake Tech illustrate the adaptability and impact of this approach. Moving forward, sustained collaborations among faculty, universities, industry partners, and student advisors will be essential for expanding and marketing stackable credential pathways, ensuring the demands of both students and the workforce.

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Authors' Note

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