Credentials for Life: Embracing "Alternative Credentials"

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Lifelong learning has remained the mantra for community colleges since the mid-nineties, reportedly evolving from the phrase, "life-long learners," describing those who amassed resumes of credentials in the form of traditional degrees, industry-issued certificates, and special interest completions. The term was first used to reference all types of learning, not just k-12 classroom experiences, but cradle to grave, inside and outside the classroom. Colleges built entire marketing campaigns and mission statements around the concept over the years and individuals and employers seem to agree that the current and future workforce will be in a perpetual state of learning. Credentials are critical to demonstrating competencies both for individuals' resumes and for increasingly changing skills needs by employers. In the last few years employers have added learnability and adaptability to their desired and required skill sets. So if we all understand and accept lifelong learning and credential attainment as how we will live our lives, why do we still have a skills gap?

In short, it is complicated, and there are thousands of articles and books written and read every day to try to understand and affect workforce issues. Strategies and best practices have been shared in conferences and through associations and professional organizations all over the country for many years. There are common themes like partnerships, industry-aligned programs, apprenticeship, industry-recognized credentials, and career pathways. Which ones should colleges use? All of them, or as many as possible. A well-developed workforce strategy should incorporate numerous best practices and themes. Employer engagement is the most critical component. Community colleges focus on student success – preparing students to be successful in their careers – which in turn, depends upon the success of the employers.

What do employers want and how do you know?
Employers are dealing with workforce skills gaps, labor shortages, and lack of career awareness in the labor pool. Talent is a critical and limited resource as industry sectors compete to attract a shrinking workforce by increasing wages and benefits while trying to remain profitable. To support their challenges, they want workforce solutions that both provide the skills they need and shorten the time to competency. Employers want productivity and profitability in their processes and in their employees.

Community colleges have to think like their business partners and work with them to craft solutions to workforce issues and ensure the quality of life for their communities and the future of the nation. Companies use data to make decisions and community colleges must develop a similar

approach. Ivy Tech Community College partnered with employers and the Department of Workforce Development to identify and address the skills gap in high-wage, high-demand careers in Indiana. We developed a quadrant strategy based upon data-driven employer demand. The following illustrates the way we use data to group our programs into quadrants and align with labor market demands. We met with employers and other stakeholders to validate the results. Each of our 19 campus service areas across the state developed a plan to focus on the right programs, growing them to meet employer demands and having them in the right locations so that graduates could pursue successful careers.
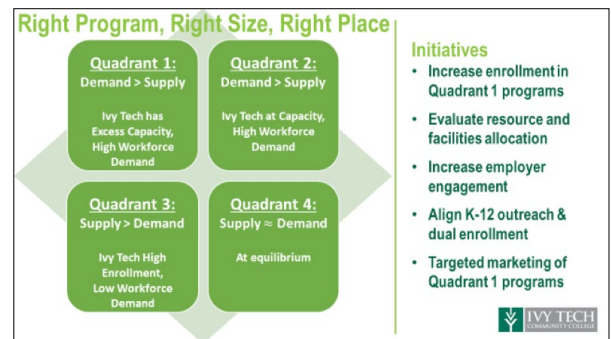
How do you provide what employers want? Employers are focused on increasing productivity and profitability. They need educational solutions that are:

1. Aligned and relevant to the skills and competencies needed for each career
2. The shortest time and route to competency
3. Industry recognized and valued credentials.

It is not easy to determine the skills and competencies employers need for their positions so Ivy Tech decided to start with hard-to-fill, high wage and high demand positions. Our Advanced Manufacturing, Engineering and Applied Science division, like most technical schools, had many of the desired credentials embedded into the programs from work with local employers and associations like the National Association of Manufacturers (NAM). The curricula for each program is built on industry-recognized and relevant certificates and certifications providing multiple entry and exit points for students in their chosen career pathway, and for employers to use to skill up their employees. We added internships to our curriculum to ensure that students had industry experience complementing their education. Our workforce alignment consultants and deans meet regularly with employers in their service areas to determine the skills needed and design a solution providing them with a credential demonstrating competency in the shortest time possible. It could be credit or non-credit. If it is a certification, we crosswalk it to credit, creating a pathway for students to continue their education and skills attainment.

It is absolutely critical for educators to engage employers and other business and economic stakeholders in meaningful ways in order to ensure that credentialing programs reflect labor market needs.

– Veronica Buckwalter

The question before us is not…how to replace degrees or the institutions that confer them, but instead, how to make them best serve the needs of colleges and universities, faculty members, society, students and employers.

– Paul Freedman

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EMERGING LEADER PERSPECTIVES

While evidence suggests that a college degree is still the best avenue to a rewarding career, the growth of alternative credentials is strongly impacting community colleges. Today, the category of "alternative credentials" has expanded to include digital badges, MOOC certificates, nanodegrees, boot camp certificates, professional certifications, and other types of qualifications offered by organizations outside academe. As a result, a growing number of colleges are partnering with employers and other training providers to offer alternative credentials. We posed the following question to emerging and national leaders. Their answers appear below.

QUESTION OF THE MONTH:

How can community college leaders best strengthen the development of high quality credential programs and increase their value to employers?

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Community colleges trade, at least in part, in the currency of college credits, a feature which gives them a distinct advantage in making learning and credentials "stackable." Community colleges should view this potential as affording the ability to be a value-adding partner to students, the community, and industry, including trade associations. If credentials become stackable waypoints en-route to degrees and commoditized additions to previous learning, these credentials are likely to become less "alternative," more valuable, and increasingly relevant.

In this era of accelerated technological change, industry will be retraining perpetually and will be unable to keep pace with technological change through hiring alone; distinctions between students and workers will become blurred as work requires everyone to become a lifelong learner. Community colleges are well-suited to the versatility that credentialing will require and have the opportunity to form ongoing relationships with students as early as secondary school through dual-enrollment programs.

Community colleges have long been "centers of excellence" in technical education, and the now-constant need to realign local workforces and industries with the modern economy has made these institutions, and credentialing, increasingly relevant – a synergy which simultaneously benefits students, industry, and the local economy. Such alignment is, however, not always the case. America has a profound skills gap at a time when more people than ever are attending college – arguably a failure of our higher education system and institutions. As trusted higher education institutions in an era when the credibility of non-institutional credentialing entities is being questioned and serious concerns are being raised over whether such "non-degree alternatives" might exacerbate, rather than alleviate inequalities within society, community colleges are more important than ever (Giani & Fox, 2016; Gallagher, 2018).

The legitimacy and integrity of credentials rely almost entirely upon the credibility of the credentialing institutions. Questions have long existed surrounding how best to validate the quality of credentials and, when they are competency based, how such competencies should be measured and by whom. State systems and reciprocal agreements also give higher education an inherent credentialing advantage, though methods of measuring and certifying existing competencies remain the most likely area where tension between credit hour and competency-based systems are felt.

Community colleges, who are among the nimblest institutions within higher education, are likely to be at the frontlines of these changes. As such, community college leaders will be challenged to partner with industry and related trade associations to offer meaningful and relevant credentials for credit to make them "stackable," and to do so in a manner which endeavors to increase learning and economic opportunity for the entire community.

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"Postsecondary credentials matter more today than any time previously in history. They provide currency, or value, in the labor market and serve as key momentum points on a path to economic opportunity." (Education Strategy Group, Advance CTE, & Council of Chief State School Officers, 2018, p. 8). Gallagher (2018) found that although traditional degrees still have great value in the hiring process, alternative credentials are beginning to change the equation.

As new types of credentials appear in the marketplace, it is useful to gauge the attributes that employers associate with quality (Gallagher, 2018). Gallagher (2018) notes that in a study conducted in the fall of 2018 by Northeastern University's Center for the Future of Higher Education and Talent Strategy, the top three attributes of alternative credentials were found to be: industry validation, performance results of graduates, and the reputation of the credentialing institution. These findings indicate that institutions already engaged with employers are better positioned to succeed as postsecondary education systems continue to evolve.

Gallagher (2018) summarized employer recommended priorities for institutions to pursue to ensure the quality of high value alternative credentials:

▲ Incorporate real-world projects and engagements with employers and the world of work
▲ Award academic credit for experience and on-the-job learning
▲ Include more industry and employer validation of curriculum e.g. as with certifications
▲ Provide better systems to verify and validate credential authenticity
▲ Engage in more rigorous forms of quality assurance and accreditation
▲ Offer greater transparency in competencies and program outcomes.

Biswas (2018) suggests that a traditional credential-based hiring process does not convey an individual's workplace skills. He believes that "moving from a degree and pedigree-based hiring process to a skills-based evaluation can help organizations broaden their talent pool" (Para. 3). Gallagher (2018) states that a growing group of employers are championing skills-based hiring and recognizes that this may be a significant development for higher education as the traditional role of degrees is reshaped by analytics and more rigorous job design.

Erasing the boundaries between learning and work – while assuring quality in educational credentialing – will require a deeper understanding of employer needs and practices (Gallagher, 2018). "Ultimately, a credential is currency for students. It is up to K-12, postsecondary, and workforce leaders to ensure that students can cash in that currency to realize economic prosperity" (Education Strategy Group, Advance CTE, & Council of Chief State School Officers, 2018, p. 36).

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NATIONAL LEADER PERSPECTIVE

While evidence suggests that a college degree is still the best avenue to a rewarding career, the growth of alternative credentials is strongly impacting community colleges. Today, the category of "alternative credentials" has expanded to include digital badges, MOOC certificates, nanodegrees, boot camp certificates, professional certifications, and other types of qualifications offered by organizations outside academe. As a result, a growing number of colleges are partnering with employers and other training providers to offer alternative credentials. We posed the following question to emerging and national leaders. Their answers appear below.

Thinking Outside the Box with Alternative Credentials

Matthew Meyer, PhD

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QUESTION OF THE MONTH:

How can community college leaders best strengthen the development of high quality credential programs and increase their value to employers?

Recently, several North Carolina community college administrators suggested to a group of business leaders to set up a digital badge for participants of an innovative training solution for the information technology sector represented by the leaders. The group had pulled together a meeting to discuss their need for an improved model for training on software development and coding. The business leaders expressed their desire for an entity that would break from traditional coding academies or academic instruction and deliver training that was more in line with the process of developing software products. The leaders described an industry concept called three-in-a-box, where team members with differing roles work together to solve problems using technology or through new technology products. The proposed training innovation required a new type of credential because it fell outside typical college classroom instruction and was something less than an apprenticeship program, but would produce an individual with unique, industry-desired competencies upon completion. Thus, the digital badge that participants will earn validates the mastery of industry-recognized competencies, not time in a seat.

The digital badge created for the entity described above and other alternative credentials are becoming more popular, not merely because more education institutions are offering the credentials, but because the credentials are industry-backed or fill a flexible-transparency gap in the education marketplace. Digital badging attracts business leaders' attention because of the way the credential validates and describes the competencies and skills of the person, as opposed to educational transcripts that are confusing to interpret by the public. The badges are specifically aligned with either company skills needs or broader industry needs. Digital badges are flexible in how they upload to social media profiles, appealing to people who use social media to connect to potential employers and clients. Community colleges are also beginning to embrace the credential because of its transparency in how the badge represents skills and competencies validated and backed by industry, making the credential simple to evaluate for credit as prior learning. Other alternative credentials include industry-recognized certifications, post-secondary certificates, state-regulated certifications and licenses, apprenticeship journeymen, and international institution credentials.

Community colleges traditionally have been the training provider for many working to obtain an industry-recognized certification. Whether it is welding, automotive repair, nursing assistant, or food preparation certifications, these valuable credentials are widely accepted across the nation and lead to high wage careers. Georgetown University's Center for Education and the Workforce (Carnevale, A, Jayasundera, T, & Hanson, A, 2012) studied the earnings of people possessing specific industry-recognized certifications and compared their wages to workers possessing an associate's or bachelor's degrees. In some cases, those with just an industry-recognized certification earned as much or more than those with 2-year or 4-year degrees.

The Center for Education and the Workforce also describes post-secondary certificates as a uniquely American invention that leads to middle-skills jobs

and high wages. In North Carolina, community colleges offer two types of this alternative credential based upon completing a specific number of credits (12 to 18 credits for a Certificate; 36 to 48 for a Diploma). The system is focusing on these types of alternative credentials by implementing a tool developed by Wake Technical Community College that compares students' transcripts against all credentials (Associates, Certificates, and Diplomas), and identifies students who are just a few credits shy of being awarded a degree or an alternative credential. Using the tool, called Finish First, WTCC identified more than 10,000 students who have attended the college in the last five years and were just a few credits short of earning a credential. This group of students may not have realized that they were close to attaining any type of credential. Implementing Finish First will identify over 40,000 people across NC's 58 colleges just a few credits short of a valuable certificate or diploma.

One other driver that may propel the creation of more alternative credentials is the establishment of education attainment goals set by many states. The Lumina Foundation reported in 2017 that 41 states have instituted statewide education attainment goals (https://www.luminafoundation.org/files/resources/01-statewide-attainment-goals.pdf).

In North Carolina, an effort called MyFutureNC recently identified an education attainment goal for the state: By 2030, two million North Carolina citizens will have a high quality post-secondary degree or credential. A bulk of the burden of achieving this goal will fall upon the community college system and the system's ability to help students obtain either an associate degree or some type of alternative credential. And due to flexibility and growing marketplace demand, alternative credentials will be a central to the state's strategy for achieving the goal.

Whether it is meeting the evolving skills needs of business and industry, or helping a state meet education attainment goals, alternative credentials will continue to grow in importance and scale. However, this will also garner attention to the quality and rigor represented by the credentials and necessitate the need for the development of guidelines to ensure quality, along with validation of the competencies documented by the credentials. If established guidelines are adhered to by credential-granting entities, then there is no reason to believe that alternative credentials will not continue to play an important role in the career pathways of millions of Americans.

Dr. Matthew Meyer is the Associate Vice President for Business Engagement, National and International Partners for the NC Community College System. Matt has 24 years of experience with community colleges, beginning as an instructor in Mechanical Engineering Technology at Asheville-Buncombe Technical Community College in 1995. Matt currently serves on the Higher Education Advisory Board for the Credential Engine and was a co-founder of the Workforce Credentials Coalition – a coalition of community colleges from across the country for the development of a single national portal for credential data.

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If it is non-credit without a certification, we can give credit through Prior Learning Assessment (PLA). We developed this crosswalk a few years ago and we keep adding to it as we embed more credentials into our curriculum.

We have a developed list of credentials embedded into programs. Our IT programs and manufacturing programs change most rapidly and our list is constantly being updated. IT is a big driver of short term certifications and we are hearing from a number of employers that their positions are becoming more like skilled trades with work-based learning models being used to develop employees. IT apprenticeships are becoming increasingly popular.

Are the right credentials in flexible formats enough?
Having the right programs, certifications, and certificates to meet the needs of the employers is not enough. As community colleges, we have the Lumina goal targeting 60% of Americans to have degrees or certificates or other high level postsecondary credentials by 2025. We must at least meet this goal to address the talent needs for the nation. Also, many community colleges are now funded on degree completions. So we are focused on student success, employer success, and national success, but we have to meet our own metrics for funding. The completion metrics do not always meet employer needs, particularly in a time when they need to shorten the time to competency and develop their employees with the skills they need as they need them.

Ivy Tech has created an innovative interdisciplinary degree option that allows employers to develop their own career pathways for their current employees using courses from a statewide elective list, certificates, and certifications. Our consultants and deans work with employers to help them design learning plans and pathways that work best for their employees and the skill sets they require. This option takes students out of "courses only" status and gives them the opportunity to earn certifications, 18 credit hour certificates (CTs), and 30 credit hour technical certificates (TCs), all stacking to an associate of applied science or AAS degree.

In addition to this degree option which supports the Lumina goals and gives employers and their employees credentials toward degrees, Ivy Tech is moving its academic delivery model to eight week classes which further shortens the time to competency.

Ivy Tech provides additional support to employer partners with a program called Achieve Your Degree (AYD), which provides concierge services to employers, including onsite advising and registration, and tuition and fee deferral to the end of the semester after grades have been issued. This program removes the financial barriers and time constraints that often plague working adults.

What are credentials for the future? We have all heard the horror stories: the robots are coming. The fact is the robots and artificial intelligence have been here for years. Information and data will continue to be the tools that become part of everyone's trade as automation and digitization permeate all economic sectors. Humans and machines of all types will work together. Most of the research suggests that 95% of jobs will not be jeopardized by new technology, but they will change. Community colleges will have to be flexible in both curricula and delivery to keep up. Employer partners must be engaged and involved and must understand our role and their role in the talent supply chain, and work with colleges to ensure the programming is aligned with their current and future needs.

We will continue to produce goods and services but with smart factories, automated restaurants, and online healthcare to name a few. Considering 85% of future jobs have not yet been invented, the best advice is to be able to change and innovate quickly. For our manufacturing, supply chain/logistics, and information technology programs, Ivy Tech is working with the Smart Automation Certification Alliance (SACA) to develop levels of certification that focus on the overlap of these sectors. The Industry 4.0 certification will coincide with the fourth industrial revolution and exist in all these programs, but will also be offered in a stand-alone format to skill up the workforce. We will not only need many of the current competencies we are teaching, we will also need additional more highly technical competencies, and some of the current skills may become foundational. Certifications and short term CTs and TCs that stack and build toward higher level degree outcomes will continue to be needed, but must be delivered in ever-changing ways with fluid content.

> *Considering 85% of future jobs have not yet been invented, the best advice is to be able to change and innovate quickly.*

With five generations now in the workforce, education and training will have to support numerous learning styles and varying technical fluency. Colleges will need to keep the traditional degree delivery, but given the challenges facing employers in hiring talent, we will have to continue to create certifications and certificates – education in a hurry. Community colleges are in a key position to shape the economic development and prosperity of the nation. Never in the history of this country has lifelong learning been more critical. Through working closely with employer partners, being flexible in curricula and delivery, and working with organizations to develop industry-recognized and valued certifications, community colleges can continue to positively impact the workforce with high quality credentials critical to the productivity and profitability of employers.

Albert Einstein said, "Once you stop learning you die." As community college leaders, we should have a strategic plan that includes student success measured by both student and employer satisfaction, with the credentials we continue to develop addressing their needs. Taking Einstein to heart, let's ensure that our communities never stop learning and individuals have the opportunity to live long, prosperous, and productive lives.

Sue G. Smith *is the Vice President for Advanced Manufacturing, Engineering, and Applied Science at Ivy Tech Community College in Indianapolis, Indiana. Ms. Smith has worked at Ivy Tech for over 20 years in various roles, including Corporate College, Workforce Development, and now in the workforce alignment academic division. Smith has statewide responsibility for and oversight of all Ivy Tech's technology and applied science degree programs, and is aligning the division statewide with industry needs by engaging corporate partners and stakeholders. She has designed, developed, and implemented numerous work-based learning, certificate, and certification programs, including industrial apprenticeships. Smith has also represented Ivy Tech in state, national, and international manufacturing organizations. She participates in numerous national and international partnerships, serving as both a speaker and host. She earned her BA from Indiana University, Bloomington, Indiana and an MA from Antioch University, Midwest in Yellow Springs, Ohio.*