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How the Evolution of Microcredentials Is Meeting the Needs of an Evolving Industry



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Microcredentials are creating a pathway for more conscious connections between postsecondary programming, sub-baccalaureate credentials and labor market outcomes.

Sometimes, a shared challenge can transform traditional adversaries into constructive collaborators.

Twenty years ago, exactly that happened. That’s when CAEL helped found NACTEL, a 501 (c)(3) coalition of major telecom companies and labor unions representing industry workers. At the time, the acronym stood for National Coalition for Telecommunications Education and Learning (more on that later). Pace University, a leader in online learning, is also a founding member and serves as the coalition’s education partner. NACTEL would offer workers new ways to gain career-advancing education and skills. It would use a model mindful of the demands on employees and the industry’s shortage of skilled workers. This model would help adults navigate the most daunting barriers to lifelong learning: the uncertainty about what skills to focus on and a scarcity of time and resources to pursue them.

It was a novel approach, especially 20 years ago. NACTEL’s online courses are informed by academic and industry expertise. Employees get flexible access to learning directly aligned with their industry’s career paths and talent workforce needs, and they benefit from significant savings. Employees in the industry, as well as those preparing to join the industry, can enjoy substantial tuition discounts. On top of that, CAEL’s expertise in prior learning assessment supports NACTEL to recognize experiential learning. A verified prior

learning assessment strategy can reduce the coursework and costs needed to complete a certificate or degree.

In the press release announcing its formation, NACTEL dedicated its unprecedented collaboration to helping the rapidly evolving telecom industry “find the skilled workers it will need over the next 5-10 years.” Two decades later, that mission remains vital. NACTEL partners now represent more than 2 million workers, up from 500,000 at its founding. I’m proud of our work



in helping workers and companies remain competitive in a constantly shifting marketplace. Along the way, NACTEL has had to adapt to ensure it too remains relevant, effective, and looking forward.

With that in mind, I'd like to mention two exciting recent developments at NACTEL. Around the start of the year, we unveiled a new brand. And, earlier this month, we launched badges. These digital microcredentials help workers and employers chart career paths and build the new competencies needed to progress along them.

NACTEL's rebranding includes a new website and a new name. These changes aren't a departure from its original mission. Instead, they signal a recommitment to it. We want to help workers and companies parlay the challenges of rapidly changing technology into opportunities for new products, new services, and new skills. That's why NACTEL is now the National Alliance for Communication Technology Education and Learning. The updated acronym reflects the reality that telecom has transcended its telephonic roots. For example, members today work within an array of high-tech disciplines such as cybersecurity, broadband, data analytics, emerging technologies and 5G.

So too do NACTEL's expanded education pathways. Today, they include up to a hundred courses, each developed by and for the industry and taught by university faculty. With class engagement facilitated by email, chat sessions, audio and video, programs are accessible 24/7. Their modular relationship makes things even more practical for workers. Depending on an individual's needs, they can be combined to complete a hierarchy of certificates. Any one of these may enable career advancement. They also can form the foundation for accredited degrees within the program. These include an A.S. in applied information technology, a B.S. in professional technology services, and an M.S. in information technology.

That leads us to the second major initiative we're rolling out as we celebrate NACTEL's 20th year: badges, which we just launched in August. Badges are digital credentials that create a portable and prominent record of a worker's mastery of selected skills and competencies. They further modularize the steps that create holistic NACTEL learning paths. To earn a badge, workers take a subset of courses that already live within a certificate or degree program. Too often, workplace skills aren't readily apparent in an employee's background. However, workers can attach NACTEL badges to social media

and resumes to showcase their mastery of specialties prized by their employers and integral to their career paths. This formal recognition of completion encourages continuous, workforce learning – in nearly real time. Badges are also “stackable.” By collecting them, employees can leap into a certificate. That can feed into an A.S. degree and beyond, depending on the aspirations of each learner.

To help roll out our badge system NACTEL brought a new partner into the group, Credly. Credly is a frontrunner in digital credentialing. Its specialty is helping organizations recognize individuals for mastering targeted skills and competencies. With a mission to connect people to opportunity based on their talent and capabilities, Credly certainly brings a kindred spirit to the NACTEL partnership.

On a practical level, Credly provides the back-end support needed to ensure a seamless badging process. The university model is great for granting universally recognized degrees. But it wasn't built to “unbundle” specific competencies. It provides credentials after program completion.

Pace University uses the Credly/Aclaim platform to communicate completion of whatever requirements are attached to a badge. Credly then generates the badge (design and branding are done by NACTEL) and digitally transmits it to the employee. Each badge lists the competencies required to earn it and can be shared instantly on various platforms. Instead of waiting to complete a full certificate or degree, employees can market their growing set of skills as they acquire them. You can look at the microcredential process as a way for employees to highlight benefits (skills) rather than just features (degree or certification). This is important for whatever you're marketing, including educational achievements!

More and more employers are making it clear that a “one and done” mindset for certificates and degrees is limiting. There is growing awareness and acceptance of lifelong learning as a necessity for career growth. Nearly one third of the working class (adults who earn between \$20,000 and \$40,000 and who completed high school but not a bachelor's degree) have a license, certification, or certificate. Since 2000, the number of non-degree certificates earned has increased by 70 percent; far outpacing the growth in bachelor's degrees. This trend is increasing demand for microcredentials. Employers are interested in using microcredentials, such as badges, to quantify systemic employee competencies. In that sense, badges can function as data points throughout workforce

development. Obvious examples include individual career paths, enterprise bench strength, talent development and recruiting.

Wes Long is the assistant vice president of AT&T University and a member of the NACTEL board. He has had a first-hand look at how microcredential badges can create value for both industry and employees. He stresses their role in helping workers to gain and renew vital communications technology skills. These form personalized pathways that lead to associate and bachelor's degrees needed in the communications industry.

The NACTEL model is a great case study for badges. It showcases how important it is to have the input of industry and higher education when creating badges. But there

are many other models and success stories. There is great potential in badges for bridging talent gaps, engaging employees, and interfacing with academic programs.

If you're interested in learning more, I invite you to attend CAEL's annual conference. It will be held in Chicago from November 6-8. Several institutions will join us in a forum on microcredentials, including Dallas County Community College District, Monroe Community College, and the University of Memphis.

In the meantime, I invite you to learn more about NACTEL and the work we do to maintain a harmonious link between learning and work. Please visit our updated website: www.nactel.org.



Christine Carpenter is vice president of membership engagement for CAEL and serves as NACTEL's executive director. Through an operating agreement, CAEL serves as NACTEL's fiscal agent and provides it with marketing support. Both CAEL and NACTEL are 501(c)(3) organizations. NACTEL partners include AT&T, CenturyLink, Communications Workers of America, Frontier Communications, the International Brotherhood of Electrical Workers, and Verizon.

Learn more at cael.org



Recognizing that adult learners are the backbone of the U.S. economy, CAEL helps forge a clear, viable connection between education and career success, providing solutions that promote sustainable and equitable economic growth. CAEL opens doors to opportunity in collaboration with workforce and economic developers, postsecondary educators, and employers, industry groups, foundations, and other mission-aligned organizations. By engaging with these stakeholders, we foster a culture of innovative, lifelong learning that helps individuals and their communities thrive. Established in 1974, CAEL, a Strada Education Network affiliate, is a nonprofit 501(c)(3) membership organization.