



Six Steps for a Successful Credentialing Program: A Case Study Review

Executive Summary

1EdTech® Consortium reached out to community members and thought leaders in digital credentials to provide case studies on their successful microcredential programs. We asked them eight questions:

- What is the purpose of your program?
- What type of credentials do you offer?
- What value does it provide to learners?
- How did you build your program?
- What were your challenges?
- What is your biggest piece of advice?
- What is the potential/current impact of your program?
- What was the key to getting your program started?

The goal was to compile common steps and strategies for creating a digital credential program that brings value to the credential earner and the issuing organization.

Twelve organizations responded, representing secondary, postsecondary and workforce educational organizations from all over the world. While the scope, audience and purpose of each program are different, six steps were consistently recommended:

- 1. Create an Internal Committee or Council
- 2. Involve External Stakeholders
- 3. Create a Taxonomy
- 4. Start Small
- 5. Focus on Ideation and Continuous Improvement
- 6. Choose a Platform that Aligns with Standards

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Definitions

This report will focus on digital credentials, as they allow for increased verifiability and mobility. To understand the various types of credentials, there are a few terms to understand:

- <u>1EdTech Competencies and Academic Standard Exchange® (CASE®)</u> is a technical specification that establishes a standard way to exchange information about academic standards, competencies, and learning outcomes across platforms and applications. It can connect all digital resources to applicable academic standards, competencies, or skills designed to align with learners.
- Comprehensive Learner Record (CLR) is a digital record that captures and communicates a learner's achievements throughout their educational experience. A CLR can include academic accomplishments, co-curricular activities, and competencies gained outside the classroom, such as career-ready skills. The CLR can compile multiple achievements, including courses, programs, degrees, and Open Badges, into a single, interoperable credential. CLRs are generally viewed as the learning component of a Learning and Employment Record (LER). A learner/earner may receive multiple CLRs throughout their learning and earning journey in both K-12 and postsecondary environments. Institutions can decide to issue CLRs at any point for a learner, as well as issue at major milestones such as degree or certification completion.
- <u>IEdTech Comprehensive Learning Record Standard™</u> (CLR Standard®) is the open data standard mechanism for formatting a CLR so that it can be easily shared online and in wallets. The CLR Standard defines a structured data format to ensure consistency when creating CLR records. The latest version of the standard offers enhanced security, flexibility, and portability adopting W3C's Verifiable Credentials (VCs) standard to ensure tamper-proof validation.
- Learning and Employment Records (LERs) are lifelong, digital records that capture and communicate an individual's learning and employment information, including skills and competencies. LERs can document learning wherever it occurs and may include records of a person's credentials, degrees, learning and employment history—including CLRs. LERs can refer to an individual digital record or a collection of multiple records and distinguish which records are verified and which records are not. Intended to bridge educational and employment spaces, LERs can provide a comprehensive view of an individual's skills and achievements.

- Open Badges are a verifiable and shareable form of digital badges that contain detailed information about the achievement and what the recipient did to earn the badge. Open Badges conform to the Open Badge standard, created by the Mozilla Foundation and currently defined by the 1EdTech Consortium. They include information on the organization or individual who issued the badge, the criteria that the badge has been assessed against, evidence of when the badge was issued, a verifiable reference to the recipient, and several other required and optional properties. Open Badges can contain detailed evidence, expiration dates, rubrics, and alignments to educational standards or frameworks, such as competency and skills frameworks. Open Badges 3.0 are natively Verifiable Credentials.
- Verifiable Credentials (VCs) are tamper-evident credentials that can be cryptographically verified to ensure authenticity and integrity. Verifiable Credentials adhere to the W3C open data standard for exchanging and proving ownership of digital documents including government, health, and education records. Open Badges and the CLR Standard can be implemented as Verifiable Credentials.
- Wallets are secure digital applications for storing and managing credentials (e.g., certificates, badges, employment records). In much the same way a physical wallet holds money and credit cards, a wallet may contain digital credentials.
 Legacy terms include digital passports, portfolios, and badge backpacks.

Six Steps for a Successful Credentialing Program: A Case Study Review

The popularity and value of microcredentials are moving from lifelong learning and professional development to postsecondary education and now it's spreading to younger generations. According to an <u>April 2024 report by the National Student Clearinghouse Research Center</u>, learners between 18 and 20 years old completed more certificates at higher education institutions than any other age group. <u>A report from HolonIQ and the American Council on Education</u> found 81% of employers think they should look at skills rather than degrees when hiring, and 95% of university leaders said they expected microcredentials to be integrated into most degree programs in the future. In addition, states are taking active steps toward skills-based hiring and even <u>replacing A-F grades with a "mastery report card"</u> and a <u>2023 report found 59 state-led initiatives to expand microcredential programs in 28 states</u>.

The excitement and growing popularity of microcredentials stems from the potential benefits to learners. They can help learners better express and understand the knowledge and skills they bring to new opportunities, they can improve the hiring process so employers can match the skills they're looking for with employee candidates, educational institutions can more easily show the value they provide to learners, microcredentials are more flexible to meet quickly evolving job-market demands, and the list goes on.

Despite the promise of digital credentials, educational institutions and organizations need to address practical challenges when developing a microcredential program. 1EdTech reached out to several members with successful credential programs and determined a series of key steps organizations need to take when first starting a credential program: create an internal committee or council, involve external stakeholders, create a taxonomy, start small, focus on ideation and continuous improvement, and choose a platform that aligns with standards.

1. Create an Internal Committee or Council

Every program pointed to the importance of getting buy-in from stakeholders within their institution or organization. This internal support is crucial for the success of a microcredential program, as it often requires collaboration and resource allocation across departments. For postsecondary institutions, these stakeholders can include a wide range of individuals and groups. For example, faculty members from relevant

departments are essential, as they will likely be involved in curriculum development and instruction. Deans and department heads play a key role in approving new programs and advocating for resources. Representatives from the registrar's office are needed to manage the integrity and validity of microcredentials. The institution's IT department will be crucial for setting up the necessary online platforms and infrastructure. Career services staff can provide valuable insights into industry needs and help students connect with potential employers. Finally, members of the institution's leadership team, such as the president or provost, must be on board to champion the program and ensure its alignment with the institution's overall strategic goals.

This collaborative approach is echoed by the <u>LER Accelerator Coalition</u>, which emphasizes the importance of coordinated action among post-secondary campus stakeholders for implementing and advancing learner employment records (LERs). Engaging these internal stakeholders early and often is vital for building consensus, securing necessary resources, and ensuring the long-term sustainability of the microcredential program.

The case study from Universidad Abierta Interamericana states, "Engaging all relevant stakeholders from the outset—including academic, technical, and administrative teams—is crucial to covering every aspect, from academic quality to data security."

Syracuse University established a Digital Badging Council to streamline governance and ensure that issued badges aligned with university standards, and "...allowed the program to scale efficiently while maintaining control over the quality and design of the digital badges. The team also focused on fostering partnerships with different academic units, ensuring that the program could meet each department's unique needs."

Input throughout the process is vital, as is identifying key champions and early adopters to showcase and promote the value digital credentials can bring to any program by supporting institutional, organizational and individual goals. Many campuses may have one or more departments already exploring credentials that can fill this early adopter role.

Several case studies pointed to a lack of understanding by leadership and across departments as a challenge they needed to overcome. Clearly defined and consistent goals and requirements can help, as can successful examples of how it works.

Idaho Division of Career Technical Education said, "SkillStack® has grown into an established part of the overall CTE curriculum in Idaho. *Identifying key stakeholders*, early adopters, and champions is an essential part of building the foundation of your digital badging platform."

The University of Central Oklahoma and other post-secondary institutions noted changing mindsets can be challenging, which is why internal champions are so important. "We had to navigate the perception of microcredentials as potential threats to traditional credentials, emphasizing their complementary nature instead. We aim to provide a transformative educational experience while simultaneously preparing students for new career opportunities."

All these experiences point to gaining internal buy-in by creating an advisory board from across disciplines and departments. This can help ensure your credentials meet your institution's needs and goals, find champions who can showcase the value of the credentials when needed, and be ready to adjust and expand the program when the time is right.

2. Involve External Stakeholders

While internal buy-in and input are important to make your program successful, external input can help you increase the value of the digital credentials you offer. A recent report from the <u>Business-Higher Education Forum</u> (BHEF) highlights the importance and value of partnerships between industry and higher education. 1EdTech members found engaging partners and leaders, outside of their organizations, to be vital to providing value to their learners.

Wichita State University engaged with the industry they were creating the credentials for, "A critical component of this work is to assemble a team representative of all stakeholders to identify and articulate the desired skills and competencies. Representation should include university faculty and K-12 curriculum leaders (if college credit is being offered and/or badges are part of a CTE pathway, work-study and/or graduation requirement), employers, and industry experts at the local, state and national level, if applicable. Employer representation must include HR departments and roles such as recruiters, trainers and, where possible, supervisors of the positions in need of training."

The University of Central Oklahoma said, "Leveraging existing partnerships. Several high-profile programs on campus have deep connections with industry. We easily approached these partners, inquired about their educational needs, and swiftly developed solutions to meet them."

Mastery Transcript Consortium (MTC) engaged potential partners early in their product development process. "MTC's team engaged in thousands of hours of co-design work with both member schools and higher education representatives, critical end users of our records. To make sure our learning records had an interface that was easy to use and tightly aligned with admissions needs, we paid particular attention to input from college admissions officers."

When identifying possible partnerships there are several things to consider: look for opportunities to deepen or revisit current partnerships for additional insights; identify high-impact areas or industries in your community, providing immediate value to the local economy and your learners.

Once you find your partners, engage in meaningful conversation about what they need, and the best ways you can supply learners with those skills. By detailing those skills in your credentials, you make it easier for your partners to fill their employment needs, and provide increased value to your learners by showcasing skills employers have difficulty finding. Employers can also show their support by offering raises, interviews or other relevant benefits that add value to the credential.

3. Create a Taxonomy

With input from those various stakeholders, organizations can create a taxonomy that ensures the quality of your credentials remains consistent as your program grows. Taxonomies can be tied to internal goals, institutional frameworks, third-party standards or any other guideposts to follow as your program grows. The point is to find one that works for your organization to maintain the value of all issued credentials.

Western Governors University (WGU) started by developing a Unified Credential Framework (UCF) to ensure uniformity and that each learner attained a high-value credential. Starting with the framework, the university was able to offer a wide variety of credentials quickly. "The framework underscores the significance of stackable credentials and our institution's ability to create credentials that yield a rapid return on investment. This approach enables students to move seamlessly and efficiently toward higher-level credentials."

Syracuse University said having a framework to work with also allows them to stay flexible. "Establishing a clear framework for digital badges, including guidelines for design, issuance, and assessment, helps ensure that the program runs smoothly and maintains the institution's credibility. Program flexibility is also critical to allow departments to adapt the system to their unique needs while staying within a standardized framework."

Taxonomies can be tied to outside standards to add to their value.

Deloitte partnered with Italian Quality Company (IQC) to credential their internal training program. The IQC Pomiager solution provides various types of badges, with information that varies depending on the purpose of the outcome. These badges are aligned with UNI, the Italian Organization for Standardization and some of them follow the framework defined by the TrustEd Credential Coalition.

They said, "We firmly believe that designing badges according to international standards helps highlight the quality of the training, and clearly demonstrates competencies. These distinctions ensure that every badge is aligned with its specific purpose, whether it is verifying skills, demonstrating professional roles, or showcasing participation."

Chicago Public Schools said following a taxonomy that their educators recognized also helped communicate the value of the badges. "Our microcredentialed learning is designed in a modular way, open to quick updates as the digital environment evolves, and aligned to the Illinois teaching standards so that educators know they are getting transferable skills that will serve them throughout their career."

4. Start Small

As you build your advisory groups and create your taxonomy, successful programs also suggest starting small and not getting discouraged too quickly when bringing together these vital groups.

"Having perseverance is number one because microcredentialing takes time and it's okay to start small so you can take lessons learned for future growth. Reflecting on our journey over the past nine years, we've seen significant growth in the adoption rate among secondary users," said Idaho Division of Career and Technical Education.

MTC also cautioned against moving too quickly, "When MTC's team sees districts struggling with the move toward competencies and personalization, the pitfalls usually result from moving too fast. Parents will push back against changes to assessment and reporting if they aren't given time to review and understand them."

UMBC said they started small but were also ready to move quickly when the time was right. "We began with small-scale initiatives, learning fast and being willing to adapt rapidly. This approach allowed us to move away from practices that didn't align with our guiding vision and strategy."

WGU said starting small was one of their most significant pieces of advice. "Only some things need to be solved in the first year; it's better to make gradual progress toward a comprehensive credentialing solution. There's never a perfect time to start, so it's best to begin with a small group of recipients and a few credentials. Learn and make improvements along the way, and work towards more automated methods and a comprehensive credentialing approach that acknowledges all relevant learner achievements with consistent, skills-based digital credentials."

5. Focus on Ideation and Continuous Improvement

Starting small allows you to build up your taxonomy and find a process that works best for your organization. It also allows you to identify unexpected challenges, or parts of your program that just don't work. When this happens, don't be discouraged. Take what you've learned, and the feedback from your internal and external stakeholders and make the necessary adjustments to build a successful program.

This is advice MylnnerGenius gives to participants in its JobReady program. "There are very few early adopters, so we work with those early adopters and show them where they can begin to make incremental changes. An assessment strategy is the first step. And it's the easiest first step if you use a validated tool designed for this purpose."

The University of Maryland, Baltimore County (UMBC) found they needed to relocate their program from the IT Department to a part of the institution that focused on lifelong learning. "For UMBC, this meant transitioning the microcredentialing program to our Division of Professional Studies, which could more effectively connect with

academic units, co-curricular programs, and student affairs, all while focusing on competencies and skills-based learning."

The partnership between L-EAF.org, The L-EAF Lab and SOLO prioritized improvement through continuous feedback from internal and external advisory groups. "Continuous feedback loops from educators, students, and industry experts refined the program to ensure practical relevance and effectiveness."

6. Choose a Platform That Aligns with Standards

Finally, every organization that provided a case study follows either the Open Badges or CLR Standard. They prioritize open standards that give additional agency to the learners over their own credentials and that carry verifiable proof of their skills and competencies. Following standards is also a way to make sure your program, and your learners' credentials, aren't locked into a single platform, or unable to be shared in the future.

Based on the IQC C-Box platform, Deloitte's program leveraged the information embedded in the badges to provide a deeper understanding of employees' skills.

"By complying with the (Open Badges) 3.0 standard, the badges are verifiable credentials that can be added to any digital wallet, giving learners more control over how their credentials are stored and used. Additionally, learners have the option to associate their badges with NFTs, guaranteeing ownership of their credentials regardless of the platform provider's existence."

Idaho CTE said following the standards increases the credibility of their credentials, "Our microcredential platform meets global education technology standards through 1EdTech and is Open Badge 2.0 certified. Being certified elevates our credentials by being verifiable, stackable, and portable, embedding them with data to verify a learner's skills and achievements."

Chicago Public Schools took its use of standards a step further and connected its badges to skills and competencies shared in the <u>Competencies and Academic Standards Exchange® (CASE®)</u> standard format. "Clearly articulate the value of microcredentials and work to align them to systems that go beyond your institution. For example, *using CASE and skill frameworks to align the badge to skills*

and standards that are known beyond CPS allows us to convey the value that they offer teachers more clearly."

1EdTech's community of digital credential thought leaders created resources to help anyone looking to prioritize standards in their procurement process here.

Conclusion

What we learned from our case studies is there are several steps institutions can take to improve the chances your microcredential program will be successful.

- 1. Create an advisory committee or council with representatives from across your organization to help create buy-in, ensure your credentials meet multiple needs of your organization, and will be welcomed as you expand the program.
- 2. Validate the program with external stakeholders to ensure your credentials effectively communicate the skills and knowledge your learners gain from your program and that those skills are in demand.
- 3. Create a taxonomy so that as your program expands, you can ensure the quality of the credentials offered remains high, as well as the value they bring to learners, outside partners and your organization.
- 4. Start small. Even if you just start by providing additional recognition to an existing program, you can see the value digital credentials can bring, and work out any changes that may need to be made as the program evolves.
- 5. Focus on ideation and continuous improvement. Don't get discouraged if things don't work out exactly the way you planned. All institutions and credentials are different, and you will need to find what works best for your organization and learners. What many of our case studies do encourage, is to be flexible, and ready to make changes as they are needed.
- 6. Choose a platform that aligns with standards. One thing all of our case studies have in common is that they align with open interoperability standards, such as 1EdTech's Open Badges and Comprehensive Learner Record Standard. These standards will make it easier for learners, employers, and other educational organizations to award, receive, and verify credentials, regardless of where the credential is issued or stored. You can find three steps to procuring 1EdTech-certified products <a href="https://procuring-necessarial-necessaria-neces

Case Studies

Chicago Public Schools



Author

Alexander Fishman, Instructional Technology Professional Learning Specialist, Chicago Public Schools

What is the purpose of your program?

Skyline is Chicago Public Schools' universal PreK-12 curriculum, built in partnership with hundreds of CPS teachers.

Chicago Public Schools (CPS) is not only one of the nation's largest school districts, but it is also a school system committed to distributed leadership. This commitment makes upskilling on a wide scale essential for our success. We can't afford for knowledge to be siloed and need to deliver up-to-date information and strategies to stakeholders across our schools. This includes everyone—not just school administrators and leaders.

The Skyline program offers a variety of microcredentials that align with CPS's goals. For example, teachers can earn micro-credentials in areas such as culturally responsive teaching, data-driven instruction, and technology integration. These microcredentials help teachers develop their skills and knowledge in specific areas, which can lead to improved student outcomes.

Since its implementation, the Skyline program has significantly impacted teacher engagement and student success. Teachers report feeling more confident and competent in their ability to meet their students' needs. Additionally, student achievement data shows positive growth in areas where teachers have earned microcredentials.

What type of credentials do you offer?

At the moment, we're offering seven "Skyline Badges." These microcredentials are standards-aligned evidence of competency based on the completion of asynchronous training and quiz.

The Skyline Essentials pathway is completed after the Navigating with Skyline, Planning with Skyline, Teaching with Skyline, Assessing with Skyline, Customizing with Skyline and Making Learning Accessible with Skyline badges have been earned.

What value does it provide to learners?

We started our journey with microcredentials to address a very specific need in curriculum implementation. The Skyline Essentials pathway is working to meet that initial need for giving teachers the basics they need to thrive in the digital learning environment of Skyline. But our mission of continuous improvement calls for more. Our students are diverse, and our educators need to expand their skill sets for differentiation in a digital learning environment. Furthermore, their time is precious. The microcredentialed learning needs to be standard aligned and have a level of quality matching our excellent professional learning opportunities. Teachers engaged in micro-credentialing should have a sense of coherence with the information they get via Teaching and Learning content teams and via their learning cycles at their schools.

The program has shown positive results, with increased teacher engagement and improved student achievement in areas where teachers have earned micro-credentials. Skyline is a valuable resource for CPS educators, providing them with the tools and support they need to excel in their roles and make a positive impact on their students' lives.

How did you build your program?

To achieve these ambitions our microcredentialed learning is designed in a modular way, open to quick updates as the digital environment evolves, and aligned to the Illinois teaching standards so that educators know they are getting transferable skills that will serve them throughout their careers. Most importantly, these learning opportunities reflect our commitment to distributed leadership by creating an architecture of participation. As highlighted in our T&L Professional Learning Toolkit, "continual connected support" is essential for knowledge transfer. This is why asynchronous trainings must be followed by intentional pathways connecting teachers across schools and networks and skilling up new leaders as the Skyline curriculum community grows. This is what we call our architecture of participation. By establishing systems for continual connected support among badge earners we ensure

meaningful knowledge transfer, which leads to improved curriculum implementation and instructional practice in our schools.

What were your challenges?

We're still growing. While more stakeholders internally are seeing the value of microcredentialing, the biggest challenge has been connecting with a vendor that can handle the logistics and shares our values. We're still in the process of finding the right match for us as many vendors sell 'badging' in bundle with other services like an LMS or a full learner record. Furthermore, the technical knowledge required to maintain the badges is sometimes lacking among the vendor staff that is readily available to us as a customer.

What is your biggest piece of advice?

Clearly articulate the value of microcredentials and work to align them to systems that go beyond your institution. For example, using CASE and skill frameworks to align the badge to skills and standards that are known beyond CPS allows us to convey the value that they offer teachers more clearly.

What is the potential/current impact of your program?

At the moment, we have reached over 2,000 teachers in 400+ schools, and the microcredential has motivated folks to skill up in our curriculum. In the future, these microcredentials can serve as windows into robust communities of practice, but this architecture of participation is still something we're working to build.

What was the key to getting your program started?

We have a robust system of professional learning offered by teams of experts and systems in place at our schools for distributed leadership to thrive. However, we need more just-in-time learning to reach our educators effectively. Microcredentials deliver learning to the CPS community at scale through our Skyline program. They don't just fill in the gaps left by more traditional forms of professional learning; they also create an intentional architecture of participation among learners that fosters connection and continuous improvement.

Deloitte S.r.l. S.B. and IQC srl / Pomiager USA, Ltd.



Authors

Francesco Antonio Frigenti, Deloitte S.r.l. S.B.; Giovanna Mantovani, Deloitte S.r.l. S.B.; Chiara Miglietta, Deloitte S.r.l. S.B.; Monica Trippodo, IQC srl / Pomiager USA, Ltd.; Damian Molyneux International Development Manager, IQC srl / Pomiager USA, Ltd.

What is the purpose of your program?

We utilize Open Badges, a globally recognized digital credential format, for every training program (be they on soft and hard skills), and for all types of participants in scope (from blue-collar workers to management). This choice stems from our approach of offering immersive and innovative programs aimed at engaging and stimulating participation. By leveraging various tools, including badges—especially when tied to gamification reward mechanisms—we enhance interest and motivation to participate in the program. Through the use of badges, we raise awareness amongst both participants and external clients to the importance of data management and what proper data management can offer. Badges, in fact, represent not only the recognition of acquired skills but are also a powerful tool for the tracking and enhancement of human capital through data. The information generated by badges allows companies to have a clearer and deeper understanding of the skills people in their organization possess thus facilitating strategic decision-making and targeted investments in human resource development. In this way, the value of human capital can be fully understood and enhanced through conscious and data-driven management.

What type of credentials do you offer?

Competence Badges are offered in most training programs. Such badges can be awarded based on various criteria. For example, they can be awarded upon the successful completion of final quizzes (e.g., reaching a certain percentage in a test) or for simply participating in a certain number of courses. We utilize credentials to certify the completion of courses on both hard and soft skills and courses delivered across different platforms (webinars, classroom training, micro-learning videos). The

credentials do not expire, and employees are able to share them across various platforms, providing verifiable proof of their skills and knowledge.

In the context of the Deloitte use case, it is worth highlighting the flexibility of the IQC Pomiager solution which provides various types of badges, depending on the course and its objectives. These badges were created using as a reference an Italian study carried out with UNI, the Italian Organization for Standardization. The Competence Badge is used to certify educational outcomes; the Job Badge is designed for professional roles; the Soft Skill Badge attests to behavioral competencies; and the Open Badge confirms participation and interest in a specific topic.

We firmly believe that designing badges according to international standards helps highlight the quality of the training, and clearly demonstrates competencies. These distinctions ensure that every badge is aligned with its specific purpose, whether it is verifying skills, demonstrating professional roles, or showcasing participation.

What value does it provide to learners?

Open Badges provide learners with verified, portable credentials that offer clear and evidence-based proof of their skills. Badges can be easily shared with employers, colleagues, and professional networks, enabling learners to showcase their achievements and competencies in a trustworthy and transparent manner. The portability of the credentials across social media platforms such as LinkedIn and internal career portals allows learners to leverage them for internal promotions, career advancement, and broader professional recognition. This not only fosters a sense of recognition, accomplishment, and growth but also motivates continuous learning and skills development in dynamic professional environments.

We want individuals to be fully aware of their capabilities, and, as previously mentioned, help employers understand the importance of tracking data regarding the skills acquired by their workforce. For this reason, we have chosen a solution that benefits learners in multiple ways.

The C-Box solution by IQC Pomiager integrates blockchain technology to ensure the traceability and immutability of the badges which adds an extra layer of security and trust. By complying with the 3.0 standard, the badges are verifiable credentials that can be added to any digital wallet, giving learners more control over how their credentials are stored and used. Additionally, learners have the option to associate

their badges with NFTs, guaranteeing ownership of their credentials regardless of the platform provider's existence.

Badges can also be integrated into the European Europass framework, which offers a standardized and recognized way to document and present skills, qualifications, and experiences across Europe. This integration facilitates professional mobility and recognition at an international level.

Learners using the C-Box® platform can create a personal profile with customizable graphic templates to showcase their achievements, including badges, and choose the level of visibility of their profile. This flexibility empowers individuals to manage how they present themselves professionally, enhancing both personal branding and skills transparency.

How did you build your program?

Our standard approach is based on co-creation, and it is developed through close collaboration with clients to ensure that the system meets the organization's specific needs. The Certification Path is typically built around the Open Badges standard, thus allowing badges to be issued, tracked, and verified digitally. Certificates can be sent through the Client's Learning Management System (LMS) or by the project team if the training is not tracked within the LMS.

Our programs are designed with a focus on competencies, ensuring that all training paths are developed to effectively build and assess the required skills. Employees can generally access all learning resources, take final assessments, and receive Open Badges based on their final score. This modular and flexible approach makes it easier for people to engage with the content at their own pace, making the learning process more accessible and adaptable to individual needs.

What were your challenges?

Clear communication of the value of Open Badges is crucial in driving their adoption and use. Participants sometimes do not fully understand the benefits and opportunities that badges provide both in terms of recognizing their skills and facilitating their personal development. It is crucial to develop communication strategies that transparently explain how Open Badges can be leveraged in professional contexts, thus enhancing their perception as meaningful tools for recognizing acquired competencies. Effective communication not only helps overcome resistance to the use

of badges but also contributes to building a more engaging and motivating learning ecosystem.

We believe that badges are also seen as a benefit by employees, enhancing their sense of value and loyalty to the company. By acknowledging and celebrating skills development, badges can foster a positive work environment and promote internal growth, ultimately benefiting both the employee and the organization.

What is your biggest piece of advice?

The biggest piece of advice for launching a successful certification program is to focus on clear communication, strategic planning, and securing buy-in from all stakeholders.

Set measurable goals that align with both organizational needs and employee development. Secure buy-in from leadership and employees to foster commitment and ensure that the program meets their expectations. Most importantly, it is pivotal to develop a strong communication strategy that consistently reinforces the value of Open Badges for career growth and professional recognition.

In addition, it is crucial to select a partner that not only issues badges but is abreast of the latest advancements in Open Badge standards and cutting-edge technology development. Not all badges are created equal; a badge is much more than a label. Attention must be paid to the data and technologies that ensure immutability (blockchain), portability (NFT), and the depth of detail of the information that generative AI can describe in the badge. Having a partner who actively follows and integrates the latest innovations ensures that your certification program is both current and future-proof and provides ongoing value to your participants. Leveraging the latest technology not only enhances security and trust in digital credentials but also optimizes the user experience, making the certification journey seamless and impactful.

What is the potential/current impact of your program?

The introduction of Open Badges significantly enhances how individuals demonstrate their verified skills both within the organization and to external stakeholders. By allowing employees to showcase their certified skills on global platforms like LinkedIn, badges not only elevate the organization's visibility but also positively influence its employer branding strategies. This recognition can boost employee engagement, as digital badges offer a tangible acknowledgment of learning achievements. Furthermore, when employees share their badges, it fosters a culture of learning.

encouraging others to upskill, which in turn drives collective growth and improved performance.

In the medium to long term, we believe that this tool, if structured according to the Open Badge 3.0 standard in alignment with the European Recommendation on microcredentials, is invaluable for collecting data on individuals. This data supports human capital management by enabling insights into employees' skills development and training pathways. What we try to convey to our clients is that adopting the use of Open Badges affords the advantage of easily tracking employees' competency levels. This insight is valuable for developing targeted training programs and strategically investing resources to ensure that the workforce possesses skills that are aligned with market demands.

This structured approach helps companies recognize the value of data for strategic decision-making regarding training investments. Open Badges not only validate acquired skills but also serve as a foundational element in building a comprehensive skills profile for individuals. This information becomes pivotal for continuously improving training programs and aligning them with business needs and fosters a more strategic approach to human capital management. Additionally, Open Badges have a positive impact on project management by simplifying and accelerating certification processes. They are particularly useful in meeting the requirements of funded training programs and supporting talent development by providing a reliable and transparent method to track and validate workforce skills.

What was the key to getting your program started?

The key to successfully launching the program was our strategic planning combined with securing strong buy-in from both leadership and employees. This began with establishing clear, measurable objectives to guide the learning process, ensuring that the program was aligned with organizational goals and the participants' needs. Stakeholder engagement played a critical role too, as their involvement ensured the program addressed their expectations and provided tangible benefits.

Open Badges C-Box® platform made it easy for participants to earn and display their badges, integrating their achievements into professional profiles with ease.

IQC Pomiager's expertise in technology and their tailored approach provided critical support in implementing a reliable and scalable digital badging system that met specific needs, drove quick adoption, delivered measurable results and ensured security.

Lastly, effective communication strategies were developed to explain the value of Open Badges to both the participants and the organization, enhancing the program's attractiveness and encouraging widespread participation from the outset.

Idaho Division of Career Technical Education



Authors

Heather Luchte, Chief Performance and Accountability Officer, and Rick Stoddart, Microcredential Coordinator

What is the purpose of your program?

Idaho implemented SkillStack®, a statewide microcredential platform, in the 2015/2016 school year to recognize skills-based learning for high school career technical education (CTE) programs. SkillStack® microcredentials were developed using standards with input from industry, secondary and postsecondary educators for over 50 CTE programs for statewide articulation. After success with secondary microcredentials, other entities began to use the platform and create microcredentials for a variety of secondary and postsecondary users.

Overall, the program serves learners, educators, and industry. Learners demonstrate skills and earn digital badges. They can build a portfolio to share badges they've earned to pursue employment and continuing educational opportunities. Educators can assess, validate, and track mastery of defined skills using the platform. Employers can also recruit candidates for employment needs from the platform based on the skills that have been awarded. This skills-based recruitment can be targeted to specific geographic regions within Idaho or statewide depending on the employer's needs.

What type of credentials do you offer?

Along with various credentials offered statewide, Idaho offers microcredentials awarded to learners for mastery of skills or concepts defined by industry and educators. Our microcredential platform meets global education technology standards through 1EdTech and is Open Badge 2.0 certified. Being certified elevates our credentials by being verifiable, stackable, and portable embedding them with data to verify a learner's skills and achievements. The microcredentials are awarded as a digital badge and a visual representation of the microcredential earned.

Idaho Division of Career Technical Education leverages SkillStack® to offer microcredentials to secondary learners in over 50 CTE pathways from Dairy Science, Culinary Arts, Emergency Medical Technician, Automotive Repair, and Welding. Learners also earn microcredentials for passing Technical Skills Assessments in their CTE pathways and digital badges for passing a national Workplace Readiness Assessment. If students complete microcredentials in their CTE pathway and these assessments, they become eligible for a Workforce Readiness and CTE Diploma. These CTE diplomas become the "gold standard" for employers to know that SkillStack® learners are career-ready with needed industry skills.

SkillStack® is also used by postsecondary institutions in Idaho to award microcredentials for staff professional development and to document skills students have learned in their programs. One university is using SkillStack® to demonstrate graduate students have research and teaching skills. Another Idaho university has utilized SkillStack® to create a pathway for students to move from a non-credit program into a formal credit-based program.

Finally, the SkillStack® platform is also being used to award microcredentials in alternative learning environments in Idaho including juvenile and adult corrections, as well as a "gap year" residential learning organization.

What value does it provide to learners?

Learners can demonstrate skills to earn microcredentials awarded as digital badges. They can build a portfolio to share badges they've earned to pursue employment and continuing educational opportunities. Since 2019, microcredentials also lived in Board policy as a recognized credential along with certificate and degree programs for academic and CTE programs. When an Idaho secondary student is awarded the stacked microcredential for completing the CTE pathway in SkillStack®, they are receiving a microcredential that is based on industry standards, developed with Idaho industry and educator input, and includes formal assessments. Future employers and

educators can be assured that these SkillStack® credentials are rigorous and include skills desired by Idaho employers.

In addition to high school CTE programs for credit articulation, workforce readiness and assessment validation, our microcredentials serve a variety of learners and that is something we are proud of. For workforce training programs, microcredentials help learners with wage progression, meeting industry needs and even higher Medicare reimbursement. Learners completing non-credit programs that offer microcredentials also complete a certificate program from the technical college. Adult Education programs will soon award digital literacy microcredentials for trainers and the public. Postsecondary institutions are also issuing microcredentials in graduate programs and want to stack certificate and degree pathway programs with microcredentials.

Alternative educational entities (e.g. Idaho Department of Correction, Idaho Juvenile Corrections, and Wisdom Ranch) partner with their regional postsecondary institutions and employers to create microcredentials and additional opportunities for learners. This helps with re-entry skills, career exploration, and offering recognized Idaho credentials. Microcredentials are awarded for employee professional development including teacher preparation programs for college credit. Educators earning microcredentials recognize the value even more now that they are earning them too.

How did you build your program?

SkillStack® was originally funded by a grant awarded by the U.S. Department of Labor (USDOL). Idaho Division of Career and Technical Education worked with a developer to bring our microcredential vision to reality after two years of planning and collaborating with various stakeholders. The platform was developed specifically to meet Idaho's needs and eventually became a statewide initiative for consistency. Our developer worked with 1EdTech early on to ensure we were meeting education technology standards and we've taken ongoing feedback from users and implemented enhancements.

Since the original funding from USDOL, the Idaho Legislature has continued to provide ongoing support, which has allowed for maintenance and enhancements. In 2018, the legislature also approved a position to coordinate statewide SkillStack® efforts and later approved two additional positions to provide technical assistance and bring development efforts onsite.

Through targeted outreach to secondary CTE teachers, SkillStack® has grown into an established part of the overall CTE curriculum in Idaho. Identifying key stakeholders, early adopters, and champions is an essential part of building the foundation of your digital badging platform.

What were your challenges?

Initial Challenges

Initially, change management was a challenge, and educators didn't understand the connections needed to make it all work. Over time, they began to see the importance of these connections. Many wanted to know when the industry would recognize microcredentials and were uncertain about their role in helping industry understand the concept. After nine years of effort, we are finally seeing increased adoption among those who were initially resistant. For secondary teachers, the legislature created a workforce readiness incentive to encourage the use of microcredentials, but that had limited impact. A few years later, when the legislature applied similar criteria for a Workforce Readiness and CTE Diploma, the adoption of microcredentials grew and was overwhelmingly positive. Now, parents are actively learning about microcredentials and inquiring about what their students need to do to earn them.

Statewide Challenges

Having a statewide definition for microcredentials and having a statewide platform has certainly helped us, but it also presents its own set of challenges. As interest in microcredentials has grown, the number of staff or resources has not kept pace. The legislature supports our efforts, but the process of requesting additional staff takes time. Furthermore, having limited funds for system enhancements while being pulled in various directions has been challenging. We have had to be mindful of prioritizing our needs within a limited budget and staffing constraints. We were also surprised to discover that we were the only state with a statewide microcredential platform. Although we were early adopters, we still needed to conduct extensive research and learn from other states.

Future Directions

While we have a statewide approach to microcredentials, the lack of a fully developed statewide digital ecosystem remains another challenge. Our agency began with microcredentials but could have started with CASE standards or a Comprehensive

Learner Record (CLR). Now that we know these interoperable resources exist, we are excited to explore where we can go next.

What is your biggest piece of advice?

There's a lot of advice we could give around the implementation of microcredentials. We would summarize this into three main areas: perseverance, policy, and partnerships.

- 1) Having perseverance is number one because microcredentialing takes time and it's okay to start small so you can take lessons learned for future growth. Reflecting on our journey over the past nine years, we've seen significant growth in the adoption rate among secondary users. For secondary educators, we told them they had to use the platform and we've seen true change management take place from early adopters to late adopters now using the system.
- 2) Idaho saw even more success with microcredentials once a workgroup put together a definition in Board policy around microcredentials. That provided more substance around our efforts and provided more value to learners and educators showing that it is a recognized credential and a component of learning leading to employment or future educational opportunities. Once a microcredential definition was added to Board policy, microcredentials were later added to other policies: prior learning assessment, program requests and advanced opportunities.
- 3) Throughout our development, we have partnered with various stakeholders, which has played a crucial role in making our program successful. We've taken feedback from educators, learners, and industry to enhance our system. We just recently started a microcredential advisory council that will develop best practices, vision, and build support for microcredentials and digital badges. Having industry partners create microcredentials shows the value from their perspective. We've also participated in many professional development opportunities and being members of 1EdTech since 2020 has been beneficial to learn from others.

What is the potential/current impact of your program?

Over the past nine years, our agency has issued over 161,000 microcredentials to over 41,000 unique learners, demonstrating significant growth and a commitment to providing diverse pathways to success. The potential is for Idaho employers to recruit any of these 41,000+ badge earners via the skills they have earned. Or for these

earners to "cash in" their badges and skills for prior learning credit at any of our Idaho colleges and universities. Starting small, we are confident this growth will continue as we integrate microcredentials into existing educational frameworks. With Idaho's Board policy officially recognizing microcredentials since 2019—and expanding the definition in 2022 to include digital badges and stacked credentials — we are well-positioned to integrate these credentials with prior learning initiatives for various learner needs. Our consultation-driven badge development process ensures that we align these needs, further enhancing the program's relevance.

As employers increasingly recognize the value of certified microcredentials, our platform plays a crucial role in connecting skilled candidates with industry needs. By fostering partnerships and encouraging employer engagement, we ensure that microcredentials are seen as more than just words on a resume. We're beginning to gather feedback from learners through their experiences, which highlights the positive impact our program has on their careers. As we continue to refine our approach, we remain dedicated to showcasing the value of microcredentials, empowering learners to effectively communicate their skills and achievements.

As trust in certified microcredentials increases among employers, our platform continues to serve as a critical connection point between skilled candidates and industry needs. Employers can actively search for candidates with the required skills, elevating the perceived value of microcredentials beyond a resume. While we traditionally work with educators and have limited direct feedback from learners, we're beginning to gather valuable insights from their experiences, revealing the positive impact of our program. By continuously refining our approach and promotional efforts through the lens of the learner, we empower them to understand and articulate the value of their microcredentials, ultimately helping them advance their careers.

What was the key to getting your program started?

Having grant funding definitely helped us get started. From there, we have had ongoing funding and resources to move our initiatives forward. We've also been successful in having ongoing visioning meetings to prioritize our work and track progress. Working with our communications team, we worked on our branding and messaging for consistency. We understood the need to promote the value of microcredentials to all audiences. Being open to feedback and having a performance improvement mindset has helped us pivot along the way and make system enhancements and changes to our processes. We've also collaborated with various partners making it a true partnership and not a top-down approach.

A cornerstone of getting this program started was looking beyond just issuing the digital badge and toward the immediate and future needs of our digital badging ecosystem. Digital badging and microcredentials are an ongoing commitment to our learners and earners and require a larger vision of the potential impact microcredentials might have in Idaho and beyond. While the path forward has not always been clear, realizing that engaging stakeholders is essential to making sure our digital badges are meaningful and trusted in any of the contexts the learner might use their SkillStack® badges. SkillStack® has been fortunate to have been developed as part of the overall vision for CTE in Idaho which already includes processes for industry and educator input. This has been key for the Idaho Division of Career Technical Education (IDCTE) to take the time to envision and articulate the landscape our microcredentials will interact in once released into the wilds of postsecondary prior learning requirements, employer needs, and future technology innovations. Issuing a digital badge is the easy part. It takes ongoing work to envision what happens next.

In addition to having a larger understanding of the digital badging ecosystem within Idaho, having an on-the-ground understanding of the learning environment in which badges will be awarded has also been key. IDCTE already had a deep understanding of CTE teacher needs, capabilities, and roadblocks. The SkillStack® team developed guides, lesson plans, and video tutorials to aid teachers in helping not only understand microcredentials but also assist them with teaching their students the value of microcredentials. Creating these educational microcredential resources has helped build the necessary infrastructure for Idaho educators to adopt SkillStack® microcredentials.

Mastery Transcript Consortium (MTC)



Author

Mike Flanagan, CEO

What is the purpose of your program?

Mastery Transcript Consortium® (MTC), an ETS company, is a national and global nonprofit membership organization that helps make mastery learning—or competency-based education—available to all learners. Because this approach does not generate traditional metrics, we co-create uniquely flexible and scalable learning records to solve the challenge of credentialing. MTC accelerates equitable access to and widespread implementation of mastery learning models, empowering students to showcase competencies and share evidence of their learning.

Legacy systems don't support next-generation learning models. Our tools are optimized for personalized, competency-based learning at scale.

What type of credentials do you offer?

MTC offers two competency-based digital learning records, both issued by member schools. Each can be generated as a CLR (1.0).

- Mastery Transcript: designed as a full alternative to the traditional (legacy) transcript and optimized for use in college admissions. Rather than listing grades and GPA, it shows foundational and advanced credits for specific competencies mastered, along with courses taken.
- MTC Learning Record: designed to supplement the traditional transcript, it captures students' learning experiences and competencies mastered, no matter where learning occurs.

The MTC Progress Tracker is a corresponding tracking and reporting system that feeds into either learning record. It allows schools to track learners' growth over time throughout their K-12 experience.

What value does it provide to learners?

MTC's learner-centered digital tools offer a rich picture of what young people know and can do.

Learners at MTC's member districts and schools are empowered with greater choice and voice when it comes to what they learn and how they demonstrate their proficiency. MTC's design philosophy is rooted in that concept of increasing student agency: our tools enable learners to curate their unique learning records, uploading

evidence of their best work in connection to the competencies and skills their school or district cares most about. In turn, educators provide verification and feedback, using a school's rubrics. When learners take ownership of their growth and share achievements they care about, they stay invested and motivated to learn.

For college admissions officers, MTC's learning records offer more and better information about applicants, when compared to traditional transcripts. These readers are increasingly frustrated by the lack of meaningful signals represented by courses and grades, a situation made worse by accelerating grade inflation nationwide. Our records offer these users actionable insights about applicants; they capture the outcomes of deeper, interdisciplinary, and project-based learning experiences offered by MTC member schools, and enable schools to showcase evidence of skills prioritized as part of a Graduate Profile.

How did you build your program?

In the early phases of our product development, MTC's team engaged in thousands of hours of co-design work with both member schools and higher education representatives, critical end users of our records. To make sure our learning records had an interface that was easy to use and tightly aligned with admissions needs, we paid particular attention to input from college admissions officers.

Today, member schools use MTC's digital tools as part of the overall design and implementation of broader "mastery" or competency-based learning initiatives. Nipmuc Regional High School, part of the Mendon-Upton Regional School District (MURSD) in Upton, Massachusetts, provides a good example. In 2018, MURSD established its Portrait of a Learner (PoL), which focused on the skills and competencies that enable students to be confident, capable, and happy in the world beyond school. Nipmuc created a successful rollout of the PoL through a mastery-based approach. As part of this work, the district designed a series of community conversations and collaborative workshops and launched the Portrait of a Learner Scholars program. Staff and faculty then worked gradually to incorporate the PoL into teaching and learning.

Over the past three years, Nipmuc Regional High School has piloted the MTC Learning Record (MLR) with small groups of learners. Beginning with the class of 2027, all Nipmuc students start their work to create MLRs through a semester-long freshman seminar. The work continues over their four-year journey at Nipmuc, collecting evidence, reflecting on their learning, and connecting it with the MURSD Portrait of a

Learner skills and competencies. By their senior year, students will have a completed MLR that tells their unique story of learning.

What were your challenges?

When MTC's team sees districts struggling with the move toward competencies and personalization, the pitfalls usually result from moving too fast. Parents will push back against changes to assessment and reporting if they aren't given time to review and understand them. Traditional school schedules and the systems aligned with them have been, for decades, built around an architecture of academic courses dispensed in 40 to 50-minute increments. Changes in expectations and practices take time and patience.

At the higher ed level, we need to leverage MTC's track record of <u>over 590 institutions</u> that have accepted learners applying with MTC records to generate more buy-in from system leaders on the use of CLR-based systems in admissions. We see strong interest in and early adoption of CLRs when colleges want to issue co-curricular or workforce-oriented transcripts and records that capture their graduates' skills and make the case for their employability. However, it's still very common to find that the admissions and enrollment teams in such colleges are unaware of these practices and haven't yet considered how to incorporate the use of CLRs in their work.

What is your biggest piece of advice?

MTC's member schools and districts are implementing changes in the nature of teaching and learning that emphasize sustained, deeper learning and problem-solving through iterative project-based learning and authentic performance assessment.

The most successful MTC members either have access to Learner Portraits or competency models or are building their own. They use these as a framework for instruction and assessment. MTC's tools visualize each school's locally prioritized competencies within the signature interactive "competency wheel" that is the core of our learning records.

However, even the best competency model and articulation of skill progressions won't drive much growth if learners are not given the time, space, and agency to tackle complex, real-world, interdisciplinary problems, where solving those problems requires development and mastery of durable skills.

What is the potential/current impact of your program?

We expect rapid growth and expansion in the use of MTC's learning records by students in public and private schools, districts, and states across the country. As a wholly owned subsidiary of ETS, MTC now supports the Skills for the Future initiative, a joint endeavor of ETS and the Carnegie Foundation for the Advancement of Teaching. Skills for the Future seeks to transform education from a time-based to a competency-based system, undergirded by novel measures that capture evidence of what's most important for success in high school, postsecondary education, and the workforce.

We are genuinely excited about the early successes our graduates experience when they arrive on college campuses or in the workplace, which we attribute to the innovative competency-based and mastery learning models that underpin our records. Whether students are applying to a selective college or vying for a competitive internship, we have clear signals that those who can share unique, authentic stories and evidence of competency have an easier time standing out in a crowded field. This is why schools and educators need to challenge learners and coach them to think, write, and speak in ways that develop their individual strengths and empower them to show what they know and can do.

What was the key to getting your program started?

MTC's founders recognized that there's a better way of "doing school" for high schoolers —one that is more relevant, engaging, and useful. In many places, schools and districts are already implementing powerful and innovative learning models. But it's hard for these amazing initiatives to scale because they don't line up with the old-school metrics of education—credit hours, courses, and grades. We advocate a focus on skills and authentic evidence (artifacts), which together can be used to generate powerful and effective learning records at scale.

MyInnerGenius® with JobReady® by LearningMate



Authors

David Leaser, Melissa Sadler-Nitu

What is the purpose of your program?

Workforce centers face significant challenges in meeting the needs of their clients and effectively connecting them with employment opportunities. These pain points include:

- Limited resources
- Outdated technology
- Difficulty matching job seekers with suitable position
- Difficulty finding employers the right employee match
- Keeping people in the community

Further, the changing nature of the job market, with increasing automation and gig economy work, poses additional challenges for workforce centers seeking to adapt their services and remain relevant to the needs of their communities.

Our program helps to fix that. The JobReady program, using MyInnerGenius, works with workforce centers in the State of Texas to help people move from a place of unemployment or underemployment into a place of an ideal career match. And we are using proven instruments and technologies to make that happen at scale. To date, the program has helped more than 6,000 job seekers identify careers with family-sustaining wages, careers that match their capabilities and desires.

What type of credentials do you offer?

We offer digital badges and third-party industry certifications. We assess human capabilities, including transferrable, durable skills, then provide Open Badges. Our credentials focus on entry-level target-demand workforce training credentials. We are unique in that most Learning Management Systems focus on people who are already working in a corporate structure, moving through their pathway. We're focused on people who are in the entry-level stages of the pathway, helping them obtain targeted

in-demand occupations with family-sustaining wages in roles where there are big needs in the United States.

The data in the MyInnerGenius badges provides significant value: The aggregate data reveals to potential employers the skills in a city or county, helping them to make decisions for expansion or headquarter relocation. Government agencies can use this data to market their region's desirability to potential employers.

What value does it provide to learners?

Our real value and differentiator is our approach related to the workforce: We actually work backwards from the workforce, the employer and labor market needs.

We provide highly accurate career matching by aligning a person's skills, capabilities and interests with careers they will love, careers where they will be successful. And we accelerate job placement. In many workforce centers, job seekers are matched to roles which are similar to roles they held previously. That approach relegates a job seeker to a career with little opportunity for advancement and it is keeping people in lower skilled, lower paying jobs instead of identifying higher paying careers with upward mobility. Where some workforce centers may try to guess what the workforce needs, we take a different approach: We start with the job openings and create a targeted occupation list for a city or region. That way, we can ensure there is a high demand and open job requisitions in an area before we even start.

MyInnerGenius will ingest a targeted occupation list. Then, when candidates complete the assessment, we match them to jobs they will love and where they will be successful -- and, of course, jobs which are actually available to them. We reveal to candidates' their skills and capabilities they may not even know they have, and they typically have never been able to articulate their value. We provide candidates with a pathway to get there. Workforce Center coaches and counselors receive a detailed report for each candidate, so they can quickly and easily tailor personalized career plans. And they can do it with accuracy and confidence.

Learners in workforce centers have immediate needs: They need to pay bills and support their families. This approach helps them get into placement much faster.

How did you build your program?

We built our program by thinking differently. We start with the "job to be done" and then work backward from that. Once you realize what you are in service of, everything falls into place. We then developed a unique approach to solving regional labor market job placement problems. The solution, like most others, includes people, processes, policies and tools. Once you break down the solution in that way, you can start to fill in the gaps. While change management is always the biggest obstacle to new ideas, technology is also another obstacle. To make this work, we needed a solution which could identify capabilities and workforce preferences with extreme accuracy – and do it at scale.

What were your challenges?

In many government programs, the procurement process is a significant challenge, and it can derail programs. It cripples organizations from being able to get and use new technologies. Once the procurement issues are resolved, getting mass buy-in – getting people to understand how these tools add value – is the next hurdle. That was the case here.

Change management is, by far, the biggest challenge. People can watch a presentation and agree to the solution -- that the assessments and digital badges deliver the outcomes they want -- but when it comes time to put things into practice, challenges around existing processes emerge. You must show practitioners how to incorporate these technologies into their existing processes, many of which were established and practiced for 40 years or more.

What is your biggest piece of advice?

For workforce centers, they must understand antiquated assessments, which measure the wrong capability metrics, are holding back progress and performance. We also advise clients how to improve and modernize workflow processes and implement change management. They know they have to change, but they need guidance and support in this area.

There are very few early adopters, so we work with those early adopters and show them where they can begin to make incremental changes. An assessment strategy is the first step. And it's the easiest first step if you use a validated tool designed for this purpose.

What is the potential/current impact of your program?

The impact to the labor market is significant. Workforce Centers are able to quickly reveal the capabilities in their candidates and align them to actual labor market

opportunities in their geography. The program creates targeted skills pathways which reduce time and cost to readiness. And we do it at scale.

Employers can fill jobs more quickly, and with accuracy and confidence. Job candidates have already been screened through a validated assessment process to ensure they have the skills, capabilities and workforce preferences for their open roles. That means faster onboarding, happier, more productive employees and lower attrition. Digital badges build trust with employers by providing a signal of achievement and commitment for job seekers who may not have a career history.

Job seekers are aligned to careers they will love, where they will be successful, regardless of job histories or degrees. MyInnerGenius reveals their hidden capabilities, and then we provide ideal career matches and tailored training programs. Digital badges provide them with, not only a signal of readiness, but with confidence, improved self-concept and a sense of accomplishment. That positivity radiates throughout the workforce and their relationships with others.

In fact, job seekers who go through our program are literally 10 times more likely to learn quickly, nearly four times more likely to be productive and two times more likely to be committed to the job and stay longer.

We are moving the needle with the unemployed and the chronically underemployed, providing them with great careers with family-sustaining wages. We are improving the effectiveness of workforce centers. And we are making it easier for employers to hire ideal candidates with little effort.

What was the key to getting your program started?

It all starts with leadership. This is a change management challenge. We first developed a strategy to improve the effectiveness in workforce centers. That requires leadership directives, process changes and technology adoption. By starting at the end – with the open jobs – we changed the conversation to "What is this in service of?" We developed process recommendations and implemented tools like MyInnerGenius to make this work. We then host workshops and design thinking sessions to help leaders collaborate and brainstorm on a program which fits their unique, regional needs.

The key to making big changes like this is dialog. You must start a conversation between edtech and government. You must build trust and co-create a solution.

L-EAF.org, The L-EAF Lab and SOLO Certification Partnership



Author

Jeff Burstein, Chief Student Advocate, L-EAF Lab

What is the purpose of your program?

The partnership between L-EAF.org, The L-EAF Lab, and SOLO is designed to provide a comprehensive digital credentialing system that serves both education professionals and students. Each organization plays a distinct role in this ecosystem:

- L-EAF.org develops and delivers adaptive leadership frameworks and methodologies for educators, administrators, and school leaders. It provides certified learning experiences (CLEs) that equip professionals with agility, strategy, and leadership skills to transform educational institutions.
- The L-EAF Lab is the experiential learning incubator that applies L-EAF methodologies in real-world, student-driven projects. The Lab provides internships and work-based learning opportunities, where students earn verified credentials that document their practical experience and skill development.
- **SOLO** is the credentialing platform that ensures all certifications—whether for educators through L-EAF.org or students through The L-EAF Lab—are verifiable, portable, and industry-recognized. SOLO's infrastructure aligns with Open Badges and Verifiable Credential standards, enabling both education professionals and students to showcase their achievements in a trusted, digital format.

Through this collaboration, educators gain leadership certifications to enhance institutional agility, while students develop career-ready skills and earn portable credentials that validate their work experience.

What type of credentials do you offer?

1. Certifications for Educators & Leadership Professionals (L-EAF.org + SOLO)

L-EAF.org offers digital certifications that validate skills and competencies in adaptive leadership, educational agility, and strategic execution. These certifications are issued through SOLO and focus on key methodologies such as:

- ValueFLOW (aligning educational value streams)
- StrategyFLOW (translating vision into action)
- Nested WorkFLOW (governing complex, multi-team coordination)
- WorkFLOW (collaborative execution of work in educational settings)

These certifications help school leaders, teachers, and administrators implement agile frameworks to drive continuous improvement and innovation within their institutions.

2. Experiential Learning Credentials for Students (The L-EAF Lab + SOLO)

Through The L-EAF Lab, students earn verifiable digital credentials for work-based learning experiences, project execution, and problem-solving. These credentials document skills such as:

- Project management and teamwork
- Strategic planning and execution
- Data analysis and decision-making
- Communication, leadership, and adaptability

By partnering with SOLO, The L-EAF Lab ensures that student credentials remain portable, verifiable, and aligned with industry-recognized digital credentialing standards.

What value does it provide to learners?

This partnership benefits both educators and students by providing them with trusted, skills-based credentials that enhance professional growth and career opportunities:

- For Educators: L-EAF.org's certifications help professionals build adaptive leadership capabilities, improve collaboration, and implement agile methodologies in schools. These SOLO-issued credentials serve as verifiable proof of professional development.
- For Students: The L-EAF Lab provides students with real-world project experiences, allowing them to build a portfolio of verifiable digital credentials that can be shared with employers, universities, and professional networks.

By integrating SOLO's credentialing platform, both education professionals and students can easily present their verified achievements, making them more competitive in job markets, academic programs, and leadership roles.

How did you build your program?

This credentialing system was developed through a collaborative, iterative approach:

- 1. L-EAF.org designed the certification frameworks for education professionals based on proven agile methodologies.
- 2. The L-EAF Lab integrated these frameworks into student-driven projects, allowing learners to apply concepts in real-world scenarios.
- 3. SOLO provided the infrastructure to issue and manage digital credentials, ensuring they meet global interoperability and verifiability standards.
- 4. Continuous feedback loops from educators, students, and industry experts refined the program to ensure practical relevance and effectiveness.

This multi-layered approach ensures that educators receive professional certifications, while students gain workforce-ready credentials through hands-on experience.

What were your challenges?

Resistance to Agile Practices in Education

- Problem: Traditional education models often resist change, making the adoption of agile methodologies challenging.
- Solution: L-EAF.org demonstrated successful case studies showcasing how adaptive leadership improves school effectiveness and collaboration.

Ensuring Consistency & Recognition Across Credentials

• Problem: Both educators and students needed credentials that were trusted and widely recognized.

 Solution: SOLO ensured that all credentials followed Open Badges and Verifiable Credential standards, making them transferable across learning and employment ecosystems.

Driving Awareness & Adoption

- Problem: Educators and students initially lacked familiarity with digital credentials and their career benefits.
- Solution: L-EAF.org and The L-EAF Lab integrated SOLO credentials into leadership training and student projects, emphasizing real-world value and career advancement opportunities.

What is your biggest piece of advice?

- 1. Clearly Define Roles & Audiences:
 - Ensure that educator-focused certifications (L-EAF.org) and studentearned credentials (The L-EAF Lab) are distinct yet complementary.
 - Use a centralized credentialing system (SOLO) to maintain consistency and credibility.
- 2. Prioritize Open Standards & Interoperability:
 - SOLO's adherence to Open Badges and Verifiable Credentials ensures that credentials remain portable and verifiable across industries.
 - Avoid proprietary credentialing systems that lock learners into closed ecosystems.
- 3. Emphasize Real-World Application & Continuous Improvement:
 - Credentials should be tied to practical experiences and leadership applications.
 - Build feedback loops from learners, educators, and industry partners to refine the program.

What is the potential/current impact of your program?

This partnership has already begun transforming how digital credentials support education and career development:

• Educational institutions report higher engagement among certified leaders, with improved team collaboration and strategic planning.

- Students in The L-EAF Lab have successfully leveraged their credentials to secure jobs, internships, and further educational opportunities.
- Employers and universities recognize SOLO-issued credentials, validating the skills and competencies gained through L-EAF programs.

As we continue scaling this initiative, our goal is to expand credentialing opportunities, ensuring that both educators and students can showcase their expertise in meaningful ways.

What was the key to getting your program started?

The strategic partnership between L-EAF.org, The L-EAF Lab, and SOLO was essential to building a scalable, verifiable, and impactful credentialing system:

- L-EAF.org provided the education frameworks and leadership methodologies.
- The L-EAF Lab created experiential learning environments where students applied these methodologies.
- SOLO ensured that credentials were verifiable, portable, and aligned with global standards.

This collaboration bridges the gap between education, workforce development, and digital credentialing, ensuring that learners at all levels have access to recognized, skills-based certifications.

Syracuse University and Accredible



Authors

Arthur Thomas, Executive Director, Office of Microcredentials, Syracuse University College of Professional Studies; Allison Roth, Operations Manager, Office of Microcredentials, Syracuse University College of Professional Studies

What is the purpose of your program?

Syracuse University's digital credentialing program, spearheaded by the Office of Microcredentials within the College of Professional Studies, aims to support non-credit skill-building, provide career-enhancing credentials, and make educational achievements more accessible and shareable. The focus is on offering learners verified digital badges that they can easily share on platforms like LinkedIn, allowing them to showcase acquired skills and competencies.

This program also supports broader university initiatives, including workforce development and lifelong learning, particularly for non-traditional learners. Moreover, the program supports underserved communities through partnerships with organizations like the D'Aniello Institute for Veterans and Military Families (IVMF).

What type of credentials do you offer?

Syracuse University issues various digital badges for non-credit achievements, career-enhancing skills, and, more recently, credit-bearing credentials. These credentials are structured to validate different learning outcomes, including professional development programs, executive education, and academic coursework.

The badges fall into three categories: non-credit learning achievements, credit-bearing accomplishments, and honor/achievement-based recognitions. The University is one of the first major institutions to introduce digital badges for degrees, offering learners an additional, verified way to share their academic accomplishments online.

What value does it provide to learners?

The digital credentials provide learners with a verified, easily shareable record of their achievements that helps them stand out in competitive job markets. The ability to share credentials on platforms like LinkedIn allows learners to communicate their skills and qualifications to prospective employers in a professional, verifiable way

This value is further amplified in fields where skill-based hiring is prominent, enabling learners to differentiate themselves by proving their competencies. The program also aligns with workforce development efforts, providing learners with market-relevant credentials that enhance employability.

How did you build your program?

Syracuse University's digital badging program was built through extensive collaboration across various schools and colleges. The College of Professional Studies worked with stakeholders to understand their needs and coordinate efforts.

They established a Digital Badging Council to streamline governance and ensure that the badges issued across departments aligned with university standards. This group established a <u>24-page governance document</u> around badge formats, taxonomy, and procedures that are now used as a framework when onboarding new departments. This governance structure allowed the program to scale efficiently while maintaining control over the quality and design of the digital badges.

The team also focused on fostering partnerships with different academic units, ensuring that the program could meet each department's unique needs.

What were your challenges?

One of the main challenges Syracuse faced was the initial lack of understanding and alignment around digital credentials. Faculty and staff across departments were unsure how digital badges could fit into their programs or how the public would perceive them.

Additionally, technical issues with the initial digital badge platform hindered the program's ability to scale. The data analytics were inconsistent, and the badging platform lacked the customization needed to tailor the experience to Syracuse's standards. This led to the decision to transition to <u>Accredible</u>, which offered better support and strategy, data insights, and customization features.

What is your biggest piece of advice?

Early governance and alignment are crucial to building a successful credentialing program. Establishing a clear framework for digital badges, including guidelines for design, issuance, and assessment, helps ensure that the program runs smoothly and maintains the institution's credibility.

Program flexibility is also critical to allow departments to adapt the system to their unique needs while staying within a standardized framework.

Additionally, choosing the right credentialing partner is crucial. Working with Accredible allowed Syracuse to grow the program efficiently while providing the necessary support and insights to succeed.

What is the potential/current impact of your program?

The program is already making a significant impact, having issued over 14,000 career-advancing credentials across various departments within the university. This includes partnerships with professional schools like Maxwell School of Citizenship and Public Affairs and IVMF, as well as the expansion into credit-bearing credentials, including digital badges for degrees.

The program is helping Syracuse University stand out as a leader in digital credentials, especially in areas such as workforce development and veteran education. The growing adoption across schools, combined with the increasing demand from learners for verifiable credentials, ensures that the program's impact will continue to expand.

What was the key to getting your program started?

The key to starting Syracuse University's credentialing program was understanding the demand for digital credentials across departments and building a coalition to support it. The College of Professional Studies' outreach to different schools and colleges revealed a widespread interest in digital badges, and the formation of a Digital Badging Council helped to standardize and streamline the process across the institution.

Transitioning to Accredible played a critical role in scaling the program, as it provided the technical capabilities and support needed to grow the initiative while maintaining the university's standards and branding.

Universidad Abierta Interamericana and POK – Buenos Aires, Argentina



Authors

Dra. Ariana De Vincenzi, Esp. Adriana Accinelli y Esp. Adriana Sviderskos

What is the purpose of your program?

The Academic Diploma in University Teaching is part of UAI's Pedagogical Training Program, designed for its entire academic staff, and aims to support the development of essential teaching competencies aligned with the quality standards set by its educational model. Its foundations rest on the quality of training offered, the relevance of the content, and the flexibility of training options.

The program is rooted in a comprehensive approach to teacher education, incorporating both disciplinary and pedagogical aspects to promote continuous improvement in teaching practices and educational innovation. It includes pathways in various course formats focused on each participant's experience, continuous reflection, and the genuine integration of technologies that enhance learning opportunities and foster the creation of practice communities.

What type of credentials do you offer?

The Academic Diploma in University Teaching consists of four independent microcredentials, which, when stacked, provide an academic credit-bearing credential for two postgraduate programs offered at UAI.

The Diploma program is structured into three required modules and one elective, chosen from three available options. Completion of each module (whether taken remotely or through self-paced learning) is recognized with a microcredential issued through <u>POK</u> that includes detailed certification metadata. The platform also offers a system to create learning pathways, allowing for the automatic issuance of a macrocredential upon completing the entire proposed journey.

What value does it provide to learners?

The training path has been designed to offer numerous benefits to participants beyond the specific learning outcomes intended in the program:

- Training and Updating: The learning experiences provide adaptive pathways through a course format that enables each participant to tailor the journey according to their interests and needs.
- Flexibility: The program offers various course formats: a virtual option with personalized support from an expert tutorial team, a hybrid model for targeted learning experiences, and a self-paced option for those who wish to recognize prior coursework or prefer an entirely autonomous approach.
- Integration: This approach integrates formal and informal learning pathways by recognizing prior knowledge acquired both within and outside the university, offering alternative experiences focused on developing specific skills, and providing the opportunity to continue studies in postgraduate programs.
- Recognition and Validation: Each microcredential is institutionally validated, with quality assured through the publication of recognized achievements. All issued microcredentials include metadata, providing transparency in the training received so students can effectively demonstrate the competencies and skills they have gained.

How did you build your program?

Since its founding, UAI identified itself as a pedagogical university, with a strong commitment to teacher education driving its growth. The Academic Diploma in University Teaching represents an updated, renewed, and innovative version of over 25 years of experience. This program not only aligns with major educational transformations but goes further by incorporating an academic microcredential strategy to enhance employability, lifelong learning, and access to university-level teacher training, thereby advancing professional development.

Until 2024, teacher training was conducted through independent courses that faculty members completed at their own pace under the offerings of the Academic Vice-Rectorate. Today, those experiences have evolved into structured, independent learning paths available in virtual, hybrid, or self-paced formats. When stacked, they lead to a certification offering academic credits for postgraduate studies, made possible by the equivalency of learning outcomes.

Upon meeting the completion criteria for each module, participants earn a microcredential that rigorously validates the achievement of the intended learning outcomes. Once they complete the entire learning pathway for the Diploma, they automatically receive a macrocredential that reflects the comprehensive journey taken.

In this project, our partnership with POK has been instrumental in driving this transformation by providing the technology required to issue certifications with metadata, ensuring transparency in the quality of each participant's achievements.

What were your challenges?

Digital transformation is a key objective in UAI's strategic plan, and digital credentials introduced a significant integration challenge, both technologically and academically.

Academically, it required a paradigm shift in evaluation, adopting strategies focused on learning outcomes, inclusivity, and generating evidence of achievement.

Technologically, we needed to ensure that the new microcredential issuance system aligned with academic standards while convincing stakeholders of the value and reliability of verifiable digital credentials.

Another challenge was the logistics of issuing and managing these credentials at scale. Ensuring that POK's digital credential system could seamlessly handle the complexities of modular learning pathways, metadata integration, and student tracking—without overburdening administrative resources—required careful planning and collaboration across all affected departments.

Finally, a major challenge was involving our technology team to evaluate and ensure that POK met our rigorous standards for data privacy and security policies. It was essential that the system not only be efficient and transparent but also secure and capable of protecting our students' sensitive information.

What is your biggest piece of advice?

Our biggest piece of advice is to start with a clear vision that aligns with institutional goals, ensuring the digital credential program is not merely a tech tool but an integral part of the educational strategy aligned with the institution's pedagogical model. Engaging all relevant stakeholders from the outset—including academic, technical, and administrative teams—is crucial to cover every aspect, from academic quality to data security.

A guiding principle for us in adopting digital credentials has been transparency. We view digital credentials as part of our ongoing improvement processes, enhancing transparency by issuing credentials backed by evidence of certified learning. With this goal in mind, our assessments grow stronger and our evidence of learning improves with each credential issuance, refining details as we advance.

At UAI, we also consider it essential to be flexible and responsive to students' needs. Our microcredentials are designed to reflect students' interests and formal and informal learning pathways, aligned with labor market demands. They offer personalized learning experiences, focused on skills that can be demonstrated effectively and verifiably. Committing to transparency and partnering with trusted technology platforms like POK ensures the program's credibility and long-term success.

What is the potential/current impact of your program?

The current impact of our program is substantial and continues to grow. In its first year of implementation (April 2024), we have reached 10% of the university's faculty (244 out of approximately 2,500), issuing a total of 450 independent microcredentials and 17 full certifications. This reflects our faculty's strong interest and commitment to enhancing their tech-pedagogical skills through the innovative tools offered by the diploma.

Looking ahead, we project an even greater impact. By 2026, we anticipate that 20% of the faculty will have completed the Diploma in University Teaching and that 50% (around 1,250 faculty members) will have earned at least two microcredentials. This growth will not only advance faculty members' professional development but also improve teaching quality, thereby enriching the educational experience for our students.

Additionally, we aim to extend this program beyond UAI to reach educators from other institutions who wish to enhance their university teaching skills. We also plan to incorporate internationalization opportunities, promoting cultural exchange and collaborative learning among educators from diverse countries.

What was the key to getting your program started?

The key to launching our program was having a clear institutional vision and a microcredential strategy that brought together the commitment of different university departments. Additionally, aligning with major educational and technological trends was essential, further strengthened by two bench learning experiences at TEC de

Monterrey and UOC in Spain. During this initial phase of scenario building, POK joined us, providing the essential technological foundation to make our curricular innovation feasible.

In retrospect, a powerful driver was the synergy between academia and our technology provider, creating the precise collaboration needed to accelerate the educational and digital transformations we are now experiencing. Our partnership with POK was crucial; it provided the necessary technology to issue transparent, verifiable digital credentials, facilitating the effective implementation of the program and ensuring its reliability from the outset. This collaboration enabled us to design a program aligned not only with academic quality standards but also with the university's technological and operational needs, laying a solid foundation for the program's future growth.

University of Central Oklahoma



Authors

Trevor Cox, Bucky Dodd, Cami Cooper

What is the purpose of your program?

The University of Central Oklahoma's micro-credentialing program serves a dual purpose:

For UCO students: We embed micro-credentials within existing courses and provide credentials for non-academic learning such as internships, peer-leadership opportunities, and other skills developed outside the classroom. This allows students to highlight specific competencies they've acquired that may not be evident from their transcripts alone, enhancing their ability to showcase their skills to potential employers.

For working professionals: We offer targeted learning opportunities for individuals seeking to upskill or reskill in their current jobs or prepare for career transitions. These micro-credentials provide flexible, accessible pathways for continuous professional development.

What type of credentials do you offer?

UCO offers a diverse range of micro-credentials to cater to various learner needs:

Embedded credentials: Integrated within current UCO courses, internships, and cocurricular experiential learning activities. These allow students to earn microcredentials alongside their regular coursework.

Faculty development credentials: Designed specifically for UCO faculty and staff to enhance their professional skills.

Professional micro-credentials: Focused on upskilling and reskilling for the workforce, these are available to both UCO students and external learners.

To accommodate diverse learning preferences and schedules, we offer these credentials through multiple modalities:

Live, in-person trainings

Experiential learning opportunities

Asynchronous and online courses both "on-demand" and facilitated

What value does it provide to learners?

Our micro-credentialing program offers several key benefits to learners:

Flexibility: Learners can acquire new skills and knowledge on their own schedule and budget, making education more accessible.

Skill visibility: For students, embedded credentials highlight specific competencies that may not be apparent from traditional transcripts, enhancing their employability.

Career advancement: Professional offerings enable employees to develop targeted skills needed for promotions or career transitions and communicate those skills to employers.

Cost-effective upskilling: Micro-credentials provide a more affordable and timeefficient alternative to full degree programs for those seeking to enhance their skill set.

Customized learning paths: The variety of offerings allows learners to tailor their education to their specific needs and goals.

How did you build your program?

Initial micro-credential efforts at the University of Central Oklahoma focused on experimenting with different models, approaches, and systems within the university environment.

The early foundation for micro-credentials at UCO began with the launch of the Institute for Learning Environment Design and the Certified Learning Environment

Architect[®]. This program combined skill development, credentialing, and external marketing in a unified strategy intended to engage a specific and new audience. This program helped to establish many of the principles, processes, and systems used for designing and supporting future micro-credential offerings.

Another early offering was a leadership microcredential. This program taught us valuable lessons: Without a sophisticated tracking system, it's more operationally viable to contain instruction, assessment, and credentialing within a single experience. For instance, assessing a microcredential across multiple courses in a flexible sequence can be challenging. While technology like learning pathways can help, it's often more effective to start simple—keeping all components within one managed experience.

One of the guiding principles was that microcredentials were going to be designed and assessed based on designed competency models, compared to credit hour parameters. This allowed micro-credentials to be integrated into both credit and non-credit learning experiences.

Other microcredential experiments prioritized skill development in spaces within and outside formal instructional settings. These included programs offered by student success professionals and professional education offerings.

Microcredentials at UCO were developed using a market-led and competency-focused approach. We created offerings that addressed market needs and demands, then used data from these offerings to rapidly iterate, adapt, and formalize our program. Our offerings now span a variety of disciplines from across the university and align with current Oklahoma workforce needs.

What were your challenges?

In developing our microcredentialing program, we faced several significant challenges:

Infrastructure development: Establishing systems to engage non-admitted learners required implementing an external-facing learning management system, an ecommerce storefront for registration, marketing automation, and other operational systems.

Stakeholder engagement: We needed to build excitement and understanding among internal and external stakeholders, even when ideas were in early development stages.

Market differentiation: Identifying viable opportunities for microcredentials that served specific, differentiated needs in the market was challenging. We had to ensure we weren't over-designing, to maintain the "micro" aspect of the credentials.

Shifting focus: Internally, there was—and continues to be—an emphasis on credit hours rather than skills. There's also a tendency to view academic curriculum and workforce needs as separate entities. Changing mindsets to think beyond credit hours and adopt a more workforce-focused approach to education remains challenging.

Balancing innovation and tradition: We had to navigate the perception of microcredentials as potential threats to traditional credentials, emphasizing their complementary nature instead. We aim to provide a transformative educational experience while simultaneously preparing students for new career opportunities.

What is your biggest piece of advice?

Be willing to try, re-try, and learn at a fast pace. When we began microcredentialing efforts even the term "microcredential" was very fluid and reflected a variety of different approaches. This required helping stakeholders with gaining some comfort with uncertainty and ambiguity.

Identify opportunities early that are fast, low-risk, and exciting that can help build data and examples for others to learn from.

While it is important to engage a diverse range of stakeholders early, it can also be important to identify smaller and faster ideas that are perceived as lower risk for the organization or offerings that are recognized as outside of the core educational or business model. This helps to reduce the risk of the idea being stifled because people may not fully understand it yet. Set expectations for uncertainty and change at the start.

Focus on helping people find unique and special value propositions of microcredentials. Often, people see micro-credentials as a threat or as being competitive with other types of credentials (e.g. degrees, certificates). Microcredentials should be designed to address unique, unserved needs. Focusing on these opportunities helps create a unique space for innovation that avoids unnecessary internal idea competition.

As leaders, our role needs to be caring, empathetic, and collaborative facilitators of the process. This means focusing on developing the systems for micro-credentials to grow while engaging content experts, faculty, staff, and others to connect in and contribute their talents and excitement.

Expect that there will need to be a healthy amount of communication and education to all stakeholders, including learners, about micro-credentials, the value they can bring, and ways to engage. For example, you may explore creating learner-focused resources and processes that help them understand what a microcredential is, how they can use digital badges and the value they can receive from completing microcredentials.

Resist the tendency to formalize too early. While a certain level of policy guidelines may be needed and helpful, you should also avoid making these decisions too detailed or prescriptive before data supports effective practices within a specific organizational environment.

What is the potential/current impact of your program?

We currently offer 172 different microcredentials and have issued over 15,000 credentials. Our offerings continue to expand as we collaborate with faculty to align more closely with workforce needs. We've also broadened our scope to include training that meets specific industry Continuing Education Unit requirements, extending beyond traditional micro-credentials.

We've forged unique partnerships with organizations and industries that value our microcredentials and CEU training. These partnerships are particularly beneficial for individuals seeking skill development without the need for a full degree program.

Our program has enhanced our ability to showcase the impact of our on-campus curriculum. Students can now effectively demonstrate their acquired skills to potential employers—skills that were always part of their education but previously invisible on traditional transcripts.

Now that our program is well established, we're focusing on comprehensive data collection to verify the real-world benefits of the skills developed. Anecdotal conversations with employers and event sponsors indicate learners are actively applying their new skills in their jobs, and employers are noting the positive impact of these enhanced capabilities.

What was the key to getting your program started?

The key to launching our micro-credentialing program at UCO was a combination of strategic approaches:

Starting small and iterating quickly. We began with small-scale initiatives, learning fast and being willing to adapt rapidly. This approach allowed us to move away from practices that didn't align with our guiding vision and strategy.

Engaging enthusiastic collaborators. We focused our early efforts on working with curious and willing collaborators who recognized the potential of microcredentials. By learning from their successes, we identified processes that could be systematized for scaling.

Highlighting innovation opportunities. We emphasized how microcredentials could create spaces for exploring and innovating new ideas. Many excellent concepts already existed within the organization that were well-suited for microcredentialing. By discussing and co-developing these ideas, we built ownership, engagement, and excitement for serving people in new ways.

Leveraging existing partnerships. Several high-profile programs on campus have deep connections with industry. We easily approached these partners, inquired about their educational needs, and swiftly developed solutions to meet them.

Fostering a culture of experimentation. We created an environment where it was acceptable to try new approaches, learn from failures, and rapidly adapt. This culture of experimentation was crucial in the early stages of program development.

By starting small, remaining flexible, and focusing on collaboration and innovation, we built momentum and gradually expanded our offerings.

University of Maryland, Baltimore County



Author

Collin Sullivan, Program Director for Digital Credential Innovation, Extended Studies, Division of Professional Studies

What is the purpose of your program?

The primary purpose of <u>UMBC's microcredential program</u> is to provide learners with clear, verifiable digital assets that detail the specific knowledge, skills, abilities, and achievements they acquire through their educational experiences. This empowers learners to showcase their competencies to employers, graduate schools, or other third parties and apply them in future learning opportunities, supporting their lifelong learning journey.

UMBC's definition of "learners" is broad, encompassing undergraduate and graduate students, staff, faculty, and non-credit or non-degree-seeking individuals. In for-credit spaces, microcredentials provide transparency where traditional transcripts fall short, offering clear details on the niche competencies that might otherwise be hidden by generic course names. In non-credit and co-curricular environments, microcredentials address the lack of formal recognition for the valuable skills learners acquire, filling a gap in institutional evidence.

For UMBC, the program not only enhances learner agency but also reinforces the institution's commitment to educational innovation and lifelong learning, helping to attract a more diverse and engaged community of learners. By recognizing competencies in real-time, UMBC supports learners in their personalized and competency-based learning.

What type of credentials do you offer?

UMBC offers a diverse range of microcredentials, categorized by the depth of learning and skill acquisition. Our taxonomy includes:

- Engagement Microcredentials: Recognize participation in specific tasks or events. This structure ensures our microcredentials align with both learning outcomes and skill development.
- Knowledge Microcredentials: Build on prior knowledge and introduce new concepts or practices.
- Proficiency Microcredentials: Demonstrate the acquisition of a transferable skill applicable in various contexts.
- Mastery Microcredentials: Represent advanced expertise in a specialized topic, often requiring significant time and effort, equivalent to a 3-credit course.
- Meta Microcredentials: Symbolize the completion of a learning pathway, comprising at least two prerequisite microcredentials from the Knowledge, Proficiency, or Mastery levels.

What value does it provide to learners?

Microcredentials offer learners clear documentation of the competencies they gain from their educational experiences. While the traditional transcript is an important institutional record, it often lacks context and obscures the true depth of a learner's work. Moreover, it fails to capture the skills acquired outside the classroom. Microcredentials, at the very least, give learners an asset they can reference to recall their competencies and articulate their value to stakeholders, particularly employers.

Additionally, the underlying technology of digital credentials significantly enhances their value. Learners have greater agency to showcase their achievements in spaces that matter to them, whether on LinkedIn, a curated e-portfolio, their email signature, or a CV. The embedded metadata within digital credentials future-proof these verifiable competencies, as more systems now use software to analyze job applications. If the microcredential includes relevant tags, it can help the individual stand out as a more qualified candidate in the job market.

How did you build your program?

Our microcredentialing program has evolved gradually since its inception in 2015. Initially, we focused on "quick wins" by partnering with colleagues across campus who were eager to identify and recognize learning in their areas. Many early microcredentials were offered by colleagues in student affairs, service learning, non-credit programs, and staff and faculty development.

By the end of 2022, our portfolio had expanded significantly through both institutional and regional partnerships. This growth marked a turning point, prompting us to adopt a broader, more strategic approach. We convened a group of peers from institutions across the country to gather insights and recommendations for strengthening our program. The findings from that report have shaped our current efforts, including the implementation of a microcredential taxonomy, advisory and governance structures, and the development of a comprehensive learner record to further enhance the program. To summarize, reflecting on the national landscape and contextualizing best practices at UMBC allowed us to meaningfully build a new version of our microcredentialing initiative.

What were your challenges?

It's important to distinguish between growing pains and more structural challenges. Growing pains are natural at every stage of the initiative, while structural challenges require long-term strategy, resources, and institutional change to address.

In the short term, one of the more straightforward challenges was selecting the right technology. Over the nine years of our microcredentialing initiative, we transitioned between three different digital credentialing platforms. These shifts weren't necessarily a reflection of the vendors but rather our evolving institutional needs. As our approach to digital credentials matured, we reassessed what we required from the platform, prompting us to move to vendors that better aligned with our goals at different points in time. However, those transitions weren't without difficulties, especially in managing the logistics of switching platforms and bringing stakeholders along during each change.

Another short-term challenge was securing broader institutional support. Early on, we were fortunate to have strong backing from our Chief Information Officer, which gave us the momentum to get started. But for this initiative to truly thrive and scale, it couldn't live solely within the IT department. We needed it to be housed within a part of the institution that focuses on lifelong learning. For UMBC, this meant transitioning the microcredentialing program to our Division of Professional Studies, which could more effectively connect with academic units, co-curricular programs, and student affairs, all while focusing on competencies and skills-based learning.

Long-term challenges, however, are more complex and revolve around scaling the program, especially in collaboration with faculty. Getting faculty buy-in means working with them to align their course learning outcomes and assessments with the

competencies we aim to credential. This process takes significant time, effort, and reflection, especially when resources, such as staffing and technology, are limited. Additionally, some faculty may view microcredentials as a threat to their pedagogical approach or to the broader liberal arts mission. It requires thoughtful conversation to explain that this initiative doesn't undermine traditional education but rather enhances it by clearly articulating the skills and competencies students are gaining. Ultimately, the goal is to make courses stronger, with better alignment between learning outcomes and assessments, as well as stronger integration within programs and institutional competencies.

Convincing stakeholders that this initiative is a win-win, benefiting both students and faculty, has been a key ongoing challenge.

What is your biggest piece of advice?

Institutions should clearly define why they are interested in offering microcredentials and what purpose they aim to fulfill. In some cases, they may find that their focus is not on microcredentials, but rather on digitizing traditional macrocredentials. Clarifying this early on will guide the direction of the work and serve as a "north star" throughout the process.

If more nimble, digestible microcredentials are the desired path, it's crucial to remember that the journey is just as important as the destination. Creating high-quality learning environments, clearly defining learning outcomes, aligning those outcomes with assessments, and using externally recognizable frameworks to ground the learning are essential steps. Practitioners should not lose sight of these aspects either.

What is the potential/current impact of your program?

UMBC currently offers over 150 microcredentials in collaboration with more than 30 campus partners, including academic programs, student affairs, and career services. Anecdotally, we've heard powerful stories from earners who have leveraged their microcredentials in interviews. For example, one student with a background in public policy used a technology-focused microcredential to apply for her current role at NASA—an opportunity she may not have pursued without that credential.

While these success stories continue to surface, we are working to institutionalize data collection to better assess our microcredential program's overall impact. Looking ahead, we see significant potential for our microcredentials to increase access to higher education by helping learners identify the right credentials at the right time. In many

cases, we aim to use microcredentials as a stepping stone toward macrocredentials, such as certificates and professional degrees.

What was the key to getting your program started?

Strong support from institutional leadership was key to launching our microcredentialing program. Initially championed by our Chief Information Officer, the initiative expanded as it entered academic spaces, gaining advocacy from our Vice Provost for Professional Studies. Other key leaders, including the Vice Provost for Enrollment Management, the Vice President for Student Affairs, and our new Provost, have also supported this work. Microcredentialing aligns closely with our mission to promote lifelong learning and make higher education accessible to all learners.

Western Governors University



Authors

Tyson Heath, Director of Academic Standards and Policies; Kacey Thorne, Director of Academic Strategic Initiatives; Laura Williams, PhD, Senior Leader of Assessment Integrity; Lauren Serpati, PhD, Senior Leader of Credential Integrity; Brent Capriotti, Senior Academic Initiatives Strategist; Alastriona Cotita, Lead Business Owner

What is the purpose of your program?

WGU's digital credential program fosters transparency and accessibility for all students and graduates. The program is meticulously crafted to guarantee that individuals' skills, competencies, and credentials are easily shareable through learner wallets built upon open, interoperable data standards. This comprehensive initiative encompasses all facets of the organization. It strongly emphasizes identifying skills relevant to the workforce, establishing comprehensive credential frameworks, and issuing digital badges that conform to open standards. The program's focus on transparency and accessibility ensures that individuals can effectively showcase their achievements and capabilities to potential employers and educational institutions.

What type of credentials do you offer?

WGU has developed the Unified Credential Framework (UCF), offering a detailed overview of a wide variety of credentials available for credit, all validated by our rigorous competency-based assessment model. Our educational opportunities span undergraduate and graduate degree programs, certificate programs, and microcredentials at both the certificate and specialization levels. We issue diplomas in PDF format via Paradigm and provide microcredentials in Open Badges 2.0 format through Canvas Credentials.

The framework underscores the significance of stackable credentials and our institution's ability to create credentials that yield a rapid return on investment. This

approach enables students to move seamlessly and efficiently toward higher-level credentials. Additionally, we are focusing on issuing course-level achievement badges as verifiable credentials in the Open Badges 3.0 format using the MIT DCC service. In collaboration with our wallet vendor, iQ4, we are working towards publishing wallet contents in LER-RS format, which follows HR Open Standards, to enhance our credential offerings further.

What value does it provide to learners?

WGU is deeply committed to ensuring that every student earns credentials that hold substantial value and lead to promising opportunities. To achieve this, our credentials are designed to meet rigorous relevancy, integrity, transparency, and personalization standards. We firmly believe that a valuable credential should directly pave the way to employment or seamlessly connect to a well-defined educational pathway that leads to meaningful career opportunities.

At WGU, all credentials are carefully designed to align with the specific skills learners acquire, enabling them to communicate their skill set to potential employers. This skill-centric approach ensures students can effectively demonstrate their competencies and expertise to prospective employers, improving their employment and career advancement chances. Furthermore, our credential design incorporates onboard metadata for consuming systems, such as digital wallets. This metadata makes the credentials more meaningful and assists with essential tools like career compassing and identifying relevant job opportunities. This added layer of information enhances the value of our credentials for the students, employers, and career development platforms, facilitating a more efficient and targeted job-matching process.

Moreover, our framework for issuing credentials and micro-credentials is built on transparency, empowering students to comprehensively understand and articulate the skills validated throughout their educational journey. This transparent approach creates a crucial link between higher education and employers, fostering a shared language that facilitates seamless alignment between future workforce needs and the skills possessed by graduates. By establishing this common language, we bridge the gap between academia and industry, ultimately ensuring that our students are well-prepared to meet the evolving demands of the job market.

How did you build your program?

The issuance of digital credentials has been steadily increasing, with higher education institutions, private industries, and governments recognizing the value of implementing a badging system. WGU first issued Open Badges 2.0 badges via Badgr in 2019 and subsequently began developing a comprehensive skills-based credential framework, commencing with an in-depth exploration of the current credentialing landscape in 2021. This involved extensive research to establish standard definitions, identify fundamental credential components, and explore the intersections between academic credentials and workforce requirements. The examination encompassed a review of European models, US-based credentialing initiatives, and other higher education institutions. The findings revealed a landscape marked by ambiguity and inconsistency, prompting WGU to seek a cohesive approach to credentialing that would best align with its academic structure.

The team understood that developing a comprehensive framework was crucial to ensuring uniformity and providing each student with the opportunity to attain high-value credentials. By implementing the Unified Credential Framework (UCF), WGU aimed to establish a credentialing system that allows learners to earn value as they pursue higher-level credentials progressively. Each credential is aligned with indemand skills, ensuring that every microcredential equips learners with specific professional or academic competencies. WGU defined the following principles to guarantee that all issued credentials hold significance in the eyes of employers:

- Value: The achievements attained through the framework elevate the value of the credentials, creating meaningful pathways to various opportunities.
- Relevance: The achievements within the framework acknowledge both professional and personal competencies and skills explicitly aligned with high-demand workforce needs.
- Integrity: The achievements require verification of competence, which is assessed through authentic, real-world workforce use cases.
- Portability: The achievements are issued in open standards, ensuring seamless portability between different organizations.

Another critical factor was selecting the proper interoperable standards to ensure digital credentials' long-term portability and verifiability. Understanding that metadata is the backbone of trusted credentials, WGU focused on creating a consistent "metadata recipe" that accurately describes each credential's components and makes meaningful alignments to occupations by leveraging external frameworks.

What were your challenges?

Implementing a university-wide framework presented several challenges, particularly in securing buy-in from leadership across various departments impacted by the framework's tenets and requirements. Before the implementation, there needed to be more consistency in creating and defining microcredentials. The introduction of the UCF aimed to address this issue by providing the institution with standardized definitions, essential components for offering microcredentials, and direct alignment with workforce needs. This newfound transparency represented a significant shift for the institution, requiring considerable effort to gain leadership buy-in. However, once the framework was launched and comprehensive communication plans were shared, leadership began to recognize the value and purpose of the framework, acknowledging its potential impact on students.

Contrary to initial concerns about the framework constraining innovation and limiting the issuance of microcredentials, the UCF resulted in an expansion of offerings and provided new avenues for the institution's portfolio strategy to thrive. This expansion enhanced the institution's ability to meet the evolving needs of students and the workforce and demonstrated the framework's capacity to drive innovation and growth.

What is your most significant piece of advice?

The most important lesson from launching a credentialing framework is assessing the university's current offerings to identify opportunities. It's crucial to maintain consistency in digital badging and have a central point for issuing badges to ensure all students receive badges with the same empowering information. From a technical and operational standpoint, the advice is to start after conducting this assessment and forming a plan. Only some things need to be solved in the first year; it's better to make gradual progress toward a comprehensive credentialing solution. There's never a perfect time to start, so it's best to begin with a small group of recipients and a few credentials. Learn and make improvements along the way, and work towards more automated methods and a comprehensive credentialing approach that acknowledges all relevant learner achievements with consistent, skills-based digital credentials.

When starting a digital credential program, selecting the correct interoperable data standards should be a top priority. Institutions need to ensure that the metadata embedded in each credential is well-defined and follows open standards. This should be transparent so learners and employers can trust and easily understand the credential's value.

What is the potential/current impact of your program?

The influence of the UCF has dramatically enhanced our ability to craft compelling narratives and develop valuable credentials. This has allowed us to create a series of stackable credentials directly relevant to the workforce's needs and award them through digital badges. While designing our programs, we have identified and prioritized the most sought-after skills in the job market, which now form the core competencies of our offerings. To ensure transparency, each skill is prominently featured in the digital badge and is included in an open skills collection, complete with all the necessary metadata to meet open standards requirements. Since commencing this initiative, WGU has issued over 100,000 verifiable credentials, which current and former students have discretely shared over 48,000 times. These figures serve as a testament to our work's significant impact and value, and they underscore the accomplishments that enable our students to communicate with potential employers effectively.

Wichita State University



Author

Kimberly Moore, Executive Director of Workforce, Professional and Community Education

What is the purpose of your program?

For decades, universities have understood that graduates need to be "life-long learners." In our current technology-based, rapidly changing environment, the need for life-long learning has never been greater. Wichita State is the only urban-serving University in Kansas. Located in one of the 50 largest cities in the U.S. and the largest city in Kansas, the University is in a unique position to meet the needs of employers. Digital credentials are considered critical in fulfilling WSU's mission as an essential educational, cultural and economic driver for Kansas and the greater public good.

WSU badge courses provide skill-based, cost-effective, short-term, career-relevant credentials that meet learners' and employers' needs for workforce-ready hiring. The badges meet a variety of needs and provide a degree pathway or skills-based continuing education for those seeking to reskill or advance in their current profession. Badges also meet the requirements of licensing boards and associations for contact hours towards licensure for individuals who are already licensed.

What type of credentials do you offer?

Badges

What value does it provide to learners?

Badges are academic short courses of one credit hour or less that are designed for working professionals. They are online and self-paced. This makes workloads more manageable for someone who is already busy with a full-time job and family.

Unlike other online non-degree courses, badges are tied to credit hours and are subject to all Higher Learning Commission regional accreditation standards. Badge coursework is part of a student's permanent academic record and will appear in an official transcript. Licensed professionals may also earn contact hours toward relicensure as well as college credit. Courses are taught by experienced faculty who are subject matter experts.

The unique structure of a badge course affords Wichita State the flexibility to work with employers to identify needed skills and competencies and develop the curriculum to address those needs. This key distinction allows employers to know that the education received during a badge course is valuable and relevant.

How did you build your program?

Spring of 2015, I was directed by my President and Provost to develop a digital badge program at Wichita State. The direction provided was that I had to have one badge with enrollment for the fall 2015 semester. At the time, public health departments nationwide were undergoing national accreditation. This afforded the opportunity to collaborate with the Kansas Public Health Association, the Kansas Department of Health and Environment and Wichita State's Nursing and Public Health Sciences departments to identify the skills and knowledge Kansas health department administrators needed to prepare for accreditation. By August, I had one 0.5 credit hour badge with two enrollments. By spring 2016, five additional badges were developed to complete the series. These badges are stacked as the equivalent of the 3.0 credit hour Care of Populations in Nursing course required for an RN to BSN degree.

Potential earners included any person employed in the health care sector, with targeted marketing to public health nurses. Public health nurses constitute the largest segment of the public health workforce in Kansas and nationwide, and the BSN degree is now the recommended minimum preparation nationally. From there, a catalog of more than 100 badges was developed, and enrollment has grown experientially.

What were your challenges?

One of the most daunting challenges was educating employers and faculty on what badges were, how credentials differed from degrees and why credentials tell a more complete story of an applicant/employee than a traditional letter grade on an academic transcript.

The struggle of Credit vs. Non-Credit/Degree Seeking vs. Non-degree Seeking

What is best for the University is not always best for the employer/employee and vice versa. The most important question to answer when beginning this process is WHY? What is the purpose of your badge/digital credentials? Arguably there are reasons for credit-bearing credentials. These credentials can open pathways to degrees for some individuals and in turn boost enrollment numbers. However, credentials with credit must follow established university processes like any other for-credit course. This is often cumbersome and time-consuming. The path of least resistance is non-credit credentials. The challenge is balancing employer needs with university goals.

Academia is steeped in traditions. One such example is the agrarian calendar. Educational institutions still operate on the fall, spring and summer semester schedule. This does not meet the modern employers' need for on-demand education. Modern jobs require upskilling and reskilling in real-time and cannot depend or wait on the availability of faculty who work a 9 or 10-month contract or university curriculum and approval committees that meet from September to April. This has made responding to employers' needs challenging. As a result, employers such as ATT, Home Depot, IBM and many others have chosen to develop and issue their own badges.

Adjusting the university's application and registration processes. Individuals and employers seeking training want it now. They do not want to wait up to three weeks to be issued a student ID and email address before they can begin coursework. In addition, grades are issued only at the end of the semester. Employers and students need this information upon completion of the training.

What is your biggest piece of advice?

Do your market research. Is there a need? Is there employer support? Is there institutional support? Who and what is your competition? Identifying local, regional, and state demands through a focused effort can lead to widespread impact.

If there is a need and support, a critical component of this work is to assemble a team representative of all stakeholders to identify and articulate the desired skills and competencies. Representation should include university faculty and K-12 curriculum leaders (if college credit is being offered and/or badges are part of a CTE pathway, work-study and/or graduation requirement), employers, and industry experts at the local, state and national level, if applicable. Employer representation must include HR

departments and roles such as recruiters, trainers and, where possible, supervisors of the positions in need of training.

If there is no need and no support focus your efforts elsewhere.

What is the potential/current impact of your program?

A barrier to recruiting and retaining businesses/employers is the availability of a skilled and work-ready talent pipeline, especially in rural communities. The 24/7 availability of online skill-based badges offers a way for employers to provide needed training even when an educational institution may not be in close physical proximity. This high-quality, short-term, career-relevant training aligned with employer priorities, can in turn foster economic development in all communities and create career pathways where none have existed. Employees need opportunities to learn and grow professionally. If employers cannot provide that it is difficult to attract and retain talent.

An example is the nationwide shortage of Direct Support Professionals (DSP). These individuals provide care to individuals with intellectual and behavioral disabilities. DSPs do a variety of complex tasks for their clients which range from personal care to client empowerment and advocacy to crisis intervention. DSPs are compensated little more than minimum wage, have limited access to benefits, and receive little to no recognition, appreciation, or job mobility assistance. In the state of Kansas, the wait list for services spans 10 years due in part to a lack of DSPs.

Wichita State is using badges to address the significant barriers to recruiting and retaining DSPs while also setting the next generation up for successful, meaningful careers. WSU has established a series of eight online "badge" courses for the professional development of IDD Direct Support Professionals. Each badge course is worth 1 credit hour and equates to about 45 hours of combined online instruction and study time. The badges are stacked with three certificates.

WSU's DSP badge courses are approved for use as part of the DSP+ registered apprenticeship program, which can be found here: https://ksdspplus.com/.

What was the key to getting your program started?

Executive leadership (President and Provost) and the leadership of the faculty serving as champions for establishing the support, time, and resources needed to lead to success across all organizations.

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About the Authors



As 1EdTech's technical program manager for digital credentials, Rob Coyle is committed to expanding the success of digital credentials with Open Badges and the Comprehensive Learner Record Standard to support learning and acknowledge the skills and competencies mastered through formal and informal education and life experiences.



Kelly Hoyland serves as the director of postsecondary education and workforce programs at 1EdTech, where she works wit members to meet the challenges they face in the rapidly growing and evolving digital teaching and learning landscape. This includes working across K-12, higher education, and corporate education to make life achievements more accessible, personalized, and equitable for every learner from the start.