Leveling Up Experiential Learning: Integrating Coursera and LinkedIn Learning Micro-Credentials into Cooperative Education Courses and Alternative Work Experiences

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ABSTRACT

This case study and practical applications article examines embedding Coursera and LinkedIn Learning micro-credentials into a professional development course for Information Technology and Cybersecurity undergraduates in preparation for cooperative education (co-op) rotations. Additionally, this article examines how to integrate micro-credentials into alternative experiential programs, such as game-development simulations. It documents student feedback and implementation strategies from the University of Cincinnati, and offers practical, scalable recommendations for integrating competency-focused, employer-aligned micro-credentials into curricular and co-curricular experiential education.

INTRODUCTION

Preparing students for the rapidly evolving fields of Information Technology and Cybersecurity requires more than technical expertise. Employers consistently emphasize the importance of career-readiness skills, including adaptability, critical thinking, and professional communication, alongside domain-specific competencies (National Association of Colleges and Employers [NACE], 2023). Yet, higher education often struggles to align curriculum with employer expectations, leaving students underprepared for the demands of cooperative education (co-op) rotations and internships. For Information Technology and Cybersecurity undergraduates, this readiness gap is especially pronounced given the pace of technological innovation, the complexity of compliance frameworks, and the growing sophistication of cybersecurity threats.

By combining classroom instruction with real-world application, experiential learning fosters skill development, professional confidence, and industry-aligned competencies. Co-op is a cornerstone of this approach and demonstrates strong outcomes in employability and career preparedness (Brown et al., 2023; Towhidi & Pridmore, 2023). Research highlights that work-integrated learning not only strengthens technical abilities but also builds essential career competencies, such as teamwork and leadership, that employers consistently rank as critical (NACE, 2023). As Information Technology and Cybersecurity roles evolve, experiential education must adapt to reflect emerging workforce needs and industry standards (Towhidi & Pridmore, 2023).

One promising innovation in this space is the integration of micro-credentials. Micro-credentials, often offered through platforms like Coursera and LinkedIn Learning, provide

short, competency-based certifications validating mastery of targeted skills. Unlike traditional degrees, micro-credentials allow for rapid upskilling and highly specific alignment with employer demands (Ahsan, et al., 2023; Brown, et al., 2023). For Information Technology and Cybersecurity students, micro-credentials not only offer documentation of evolving technical skills such as ethical hacking or cloud security but also signal initiative and career readiness to employers (Gamage & Dehideniya, 2025). A growing body of research suggests micro-credentials enhance employability, expand access for diverse learners, and serve as a scalable complement to traditional academic programs (Islam et al., 2025; Gamage & Dehideniya, 2025). However, questions around standardization and quality assurance remain (Brown, et al., 2023; Alenezi, et al., 2024).

This article examines the integration of Coursera and LinkedIn Learning micro-credentials into the University of Cincinnati's Introduction to Cooperative Education professional development course (PD 1010) and the Experiential Explorations Program (EEP). These programs embed competency focused, employer-aligned micro-credentials into professional development curricula, preparing Information Technology and Cybersecurity undergraduates for co-op rotations while also piloting alternative experiential pathways such as project management and game development. Drawing on student feedback, implementation strategies, and course outcomes, this article provides practical recommendations for embedding micro-credentials into curricular and co-curricular experiential education.

BACKGROUND

Micro-credentials and Career Readiness

Micro-credentials are short, competency-based recognitions of learning that are increasingly being used to validate industry-relevant skills and signal job readiness alongside traditional degrees (Varadarajan et al., 2023). Research syntheses find that a well-designed micro-credential ecosystem can accelerate upskilling, strengthen employability, and complement curricular learning when institutions align them with quality assurance and stakeholder needs (Ahsan, et al., 2023; Brown, et al., 2023; Varadarajan, 2023). In practice, Coursera micro-credentials offer structured sequences mapped to high-demand skill areas (e.g., cloud, analytics, cybersecurity) and culminate in performance-based assessments that make competencies visible to employers. Benefits of technology certifications include enhancing skills, especially for learners starting in Information Technology, boosting salaries and improving job prospects, while costs include the time and money they take to study and complete certification exams (Coursera, 2025). When embedded in professional development and experiential courses, these credentials can help students document specific technical abilities while also demonstrating initiative and self-directed learning attributes employers consistently value (Ahsan, et al., 2023; Brown, et al., 2023; Varadarajan, 2023).

The National Association of Colleges and Employers (NACE) career-readiness framework identifies eight cross-cutting competencies that employers expect from new graduates: critical thinking, communication, teamwork, professionalism, technology, leadership, career & self development, and equity & inclusion (NACE, 2024). Recent NACE job outlook data indicate problem solving, teamwork, and written communication remain top attributes sought on new graduate resumes (NACE 2025a, 2025b).

Persistent misalignment between academic preparation and workplace expectations is well documented in cybersecurity workforce studies. The NICE (National Initiative for Cybersecurity Education) workforce framework for cybersecurity (NIST SP 800-181s1) provides a common lexicon of tasks, knowledge, and skills that curricula can target to improve program-to-job fit (NIST, 2020). Meanwhile, the ISC2 2024 cybersecurity workforce study reports nearly 60% of professionals say skills gaps significantly impair their organization's security posture, underscoring the urgency of better-aligned preparation and verified skills for entry-level talent (ISC2, 2024). Embedding micro-credentials that are explicitly cross-referenced to NICE task/skill statements can help programs close these gaps by making graduate competencies clear to employers and co-op supervisors (NIST, 2020; ISC2, 2024).

Institutional Context—University of Cincinnati Cooperative Education Model

The University of Cincinnati (UC) pioneered co-op in 1906 and remains nationally recognized for co-op (UC News, 2025). University of Cincinnati reports a Top 5 national ranking for co-op/internships and emphasizes extensive employer partnerships across sectors. In 2024-2025, UC students in paid co-op roles earned a collective $94.19 million, a 6% increase over the prior year's total, reflecting both program scale and strong employer demand (UC News, 2025). These outcomes underscore the institution's capacity to integrate credentialed learning with authentic, paid work experiences at scale (UC News, 2025).

The University of Cincinnati's co-op model is particularly salient for Information Technology and Cybersecurity students who typically complete multiple semesters of full-time, paid placements before graduation. By layering Coursera and LinkedIn micro-credentials into UC's professional development course and alternative experiential learning pathways, students can present a combined portfolio: verified micro-skills, plus documented workplace performance from co-op. This dual evidence base of competency artifacts and supervisor feedback strengthens students' candidacy for co-op rotations and full-time roles, while giving employers clearer, standardized indicators. When institutions communicate NACE competency growth alongside technical badges, they begin to address both sides of the readiness equation that employers highlight in job outlook surveys (NACE 2024; NACE, 2025a, 2025b; NIST, 2020; ISC2, 2024; UC News, 2025).

Rationale

Given the accelerating pace of technological change and the documented skills gap, UC's mature co-op infrastructure provides an ideal proven ground for scalable micro-credential integration. Coursera and LinkedIn micro-credentials, aligned with NACE competencies and the NICE framework, offer a practical mechanism to target specific technical capabilities demanded by employers, build and assess career competencies, and generate portable evidence students can showcase on resumes and in co-op/interview settings. Embedding these credentials in professional development coursework and extending them to alternative experiential learning opportunities closes the loop between learning outcomes and assessment, and labor market indicators can be tightened while honoring UC's longstanding commitment to work-integrated education (Ahsan, et al., 2023; Brown, et al., 2023; Varadarajan, 2023; NACE, 2024; NIST, 2020; ISC2, 2024; UC News, 2025). The next section presents the first case study use of micro-credentials in an academic course.

CASE STUDY 1: PD 1010 INTRODUCTION TO COOPERATIVE EDUCATION COURSE INTEGRATION

Course Overview

The primary objectives of PD 1010: Introduction to Cooperative Education at the University of Cincinnati are to introduce students to the co-op model and prepare them for successful participation in the UC Professional Practice Program. By engaging in this course, students build a foundational understanding of the history, policies, and procedures of co-op while also developing the professional skills necessary to secure and succeed in experiential learning opportunities. Key learning outcomes include self-assessment for personal growth, resume and portfolio creation, proficiency in interview strategies, and familiarity with the theory and practice of co-op as a high-impact learning model.

The target student population for PD 1010 is first-year and transfer/transition undergraduate students majoring in Information Technology and Cybersecurity. These students often enter the program with some technical skills but require structured support in developing career readiness competencies such as communication, professionalism, and intercultural awareness, to complement their technical capabilities. By tailoring professional development topics to their specific disciplinary context, the course ensures students are well prepared to translate their academic learning into workplace success while navigating the unique challenges of the Information Technology and Cybersecurity industries.

Within the course structure of PD 1010, Coursera micro-credentials and LinkedIn Learning modules play a critical role by extending students' learning beyond the classroom and offering access to high-quality, industry-aligned content. Co-op faculty integrate Coursera modules into PD 1010 to reinforce and expand technical and career readiness topics, providing students with flexible, self-paced opportunities to deepen their skills and earn industry-recognized micro-credentials. By blending Coursera and LinkedIn Learning's global learning resources with course-specific activities like resume development and interview preparation, students can make connections between universal professional competencies and the expectations of the co-op program. This integration not only diversifies the modes of instruction but also encourages students to take greater ownership of their learning and career preparation.

Implementation Process

A distinctive feature of PD 1010 is the integration of choice-based micro-credentials through both Coursera and LinkedIn Learning, allowing students to personalize their professional development experience. Rather than prescribing a single sequence of online modules or micro-credentials, the course invites students to select content most relevant to their career interests and professional goals. This flexibility

reflects the diversity of pathways within Information Technology and Cybersecurity and underscores the importance of student agency in shaping their learning journey.

In Coursera, students can pursue extended learning tracks closely aligned with technical career pathways in their field. These tracks provide in-depth, industry-recognized learning experiences complementing students' academic coursework while preparing for co-op roles requiring specialized skills. By working through modules, students not only strengthen their technical expertise but also gain credentials signaling readiness to potential employers. In parallel, LinkedIn Learning micro-credentials focus on professional and career readiness skills, addressing areas equally vital to success in the workplace. Learning pathways such as Professional Soft Skills, Develop Your Creative Thinking and Innovation Skills, and Develop Your Communication Skills and Interpersonal Influence reinforce competencies like collaboration, critical thinking, and effective communication. Additional modules on Mental Health at Work, Organizational Skills, Generative AI Productivity, and Succeeding in Remote Work reflect contemporary challenges and opportunities in the professional landscape. Collectively, these resources support students in developing the holistic skill set necessary to thrive in dynamic and interdisciplinary Information Technology and Cybersecurity careers.

PD 1010 instructors help students recognize the value of micro-credential experiences beyond simply fulfilling course requirements. Because students have choice, instructors act more like coaches and mentors, providing encouragement and support in aligning micro-credential choice with career goals. To support students in completing their chosen Coursera or LinkedIn Learning micro-credential, PD 1010 instructors include a structured sequence of upskilling assignments designed to provide accountability, reflection, and steady progress throughout the semester.

- **Upskilling Survey (5 points**): Early in the semester, students complete a survey to select their preferred Coursera or LinkedIn Learning modules. This assignment encourages students to reflect on their career goals and align their choice of micro-credentials with their intended co-op pathway.
- **Upskilling Progress Updates x 4 (10 points each x 4)**: To ensure steady engagement with the material, students submit four progress updates across the term. Each update prompts students to document their advancement through their chosen modules, reflect on developing skills, and making connect between skills and career readiness goals. A regular check-in structure reinforces student accountability while also allowing instructors opportunities to provide timely feedback and encouragement.
- **Upskilling Certification Completion (10 points)**: The final assignment requires students to provide evidence of completion for their selected Coursera or LinkedIn Learning modules. In addition to uploading certificates, students reflect on how the new knowledge and skills could be applied in their upcoming co-op experiences and long-term career development.

The scaffolded assignment structure emphasizes consistency and reflection, ensuring students not only complete their chosen micro-credential but also engage in metacognitive thinking about how their learning connects to their professional identities. This structure aligns with Kolb's (1971, 1984) experiential learning theory, which describes learning as a process that occurs through four stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation. With instructor guidance and built in course assignments, students are encouraged at the end of the course to integrate their learning into past coursework such as resume development, interview preparation, and professional narratives like elevator pitches, ensuring micro-credential experiences translate into meaningful career preparation.

Student Feedback

While students are encouraged to choose from a wide variety of Coursera and LinkedIn Learning pathways, clear trends emerge in the types of micro-credentials they pursue. On Coursera, the most common completions are the IT Support and the Cybersecurity Professional certificate programs. Similarly, on LinkedIn Learning, the most frequently selected tracks include Advance Your Skills as an IT Help Desk Specialist, Explore a Career in IT Support, Become an IT Security Specialist, and Cybersecurity Fundamentals. These patterns reflect students' desire to strengthen foundational technical skills directly relevant to their initial co-op placements, where help desk, IT support, and entry-level cybersecurity roles are common starting points. Engaging with these micro-credentials can give students a concrete understanding of the types of roles available in Information Technology and Cybersecurity, helping them to better envision their future careers while also building marketable skills.

In the Upskilling Survey assignment, students are required to answer simple questions before starting their upskilling work, one of which is "Why does this Upskilling work interest you and how do you think it will help you get a future co-op?" Student survey answers recognize the value of micro-credentials in enhancing their competitiveness in the co-op search process. Several students note completing micro-credentials gave them an advantage when communicating their readiness to employers, particularly in interviews for early career roles. As one student reflected, "By finishing this upskilling work, I'm improving my technical skills and earning a professional credential that will increase my appeal to prospective co-op employers that are searching for applicants with current, useful skills."

Another student echoed this sentiment, explaining, "Hopefully skills I learn in this pathway will prove useful in demonstrating myself during co-op interviews." Students also highlighted how having a recognized certificate provided credibility beyond their limited work experience, one saying: "Having a certificate on IT support would allow me to show employers that I am capable of providing IT support backed by a certificate not just prior experience." These perspectives suggest students view micro-credentials not only as a way to build technical proficiency but also as tangible signals of employability resonating with industry expectations of early career talent.

Overall, students who successfully complete PD 1010 leave the course with career-ready materials, such as polished resumes, updated LinkedIn profiles, and strengthened interviewing skills, alongside industry-recognized micro-credentials earned through Coursera and LinkedIn Learning. Together, these outcomes position students to enter the co-op search process with both the technical expertise and professional competencies employers value. By combining traditional career preparation with stackable micro-credentials, the course effectively prepares students to compete for highly competitive opportunities at leading technology companies such as Microsoft, IBM, Google, and other industry innovators. The next section examines a second case study of micro-credentials in alternative co-op experiences.

CASE STUDY 2: EXPERIENTIAL EXPLORATIONS PROGRAM INTEGRATION

Course Design and Purpose

The Experiential Explorations Program (EEP) at the University of Cincinnati stands out as a vital component of the co-op curriculum for Information Technology and Cybersecurity students. The EEP offers a flexible alternative to traditional co-op rotations, meeting diverse student needs and supporting those not yet ready for a standard co-op experience. Within this program, students develop skills through simulation-based experiential learning, a pathway designed to enhance technology skills and career readiness for the dynamic workforce. While some advanced students opt to create Custom EEPs to earn industry credentials, younger or less experienced students find value in the structured approach offered by tracked/pre-designed EEPs.

Through EEP, students not only cultivate technical skills but also develop essential soft skills such as time management, accountability, and communication. This immersive experience fosters independence and professional growth, preparing students to navigate the complexities of industry with confidence. Additionally, EEP ensures student progress and industry relevance through a series of key deliverables, including:

- Start of EEP Survey
- Final EEP Showcase Presentation
- Proof of EEP Completion
- End of EEP Survey

These deliverables act as checkpoints throughout the EEP, helping students stay on track, demonstrate their progress, and reflect on their learning which prepares them to succeed as well-rounded professionals in the dynamic field of technology.

Coursera Integration

When UC's College of Cooperative Education and Professional Studies partnered with Coursera in 2024, the Information Technology and Cybersecurity co-op advising team quickly embraced the opportunity to significantly enhance EEPs with the integration of the Coursera platform.

Students accessed simulation-based industry-relevant curriculum and practical experiences through Coursera's technology-centric courses and certificates. Faculty customized pathways for students based on their majors and interests, leveraging Coursera's resources to align with curriculum and co-op requirements.

The introduction of the IT Support EEP and Cybersecurity EEP pathways is designed to establish foundational concepts, methodologies, and skills essential for students new to the Information Technology and Cybersecurity domains. Through college-funded opportunities, students obtained industry-relevant micro-credentials, such as the Google IT Support and Google Cybersecurity certificates, at no personal cost. These credentials bolster their professional profiles and provide essential technology skills for career advancement.

Throughout the semester, students are granted autonomy to navigate the credential pathway with co-op faculty advisors monitoring progress metrics in the administrative side of Coursera (e.g. number of videos watched or time invested in the track) to identify any potential learning gaps or obstacles hindering advancement. This proactive approach facilitates swift resolution of challenges when students seek guidance or raise concerns with co-op faculty advisors, ensuring a collaborative effort to address issues effectively.

Following the successful launch of the initial EEP Coursera pathways, the co-op faculty advisor team responded to student feedback and demand for more specialized skill development tracks by introducing three additional pathways: the Artificial Intelligence EEP, Game Development EEP, and IT Project Manager EEP. These tailored pathways, now integral components of the suite of tracked EEP pathways available to Information Technology and Cybersecurity students during co-op rotations, cater to students' evolving educational needs and aspirations for acquiring niche skill sets.

Student Impact

In the inaugural year of integrating the EEP and Coursera, 138 Information Technology and Cybersecurity learners enrolled in one of the five available pathways. The top five skills assessed within the first 30 days of the Fall 2025 semester were SQL, data security, computer programming, communication, and data ethics, which are skills deemed essential for success in a technology-driven workplace environment. During this same time, students actively engaged with 24 to 55 distinct learning modules depending on their chosen track, with an average of 79.2% of student assessments being practice-based, providing enhanced experiential learning and career development opportunities. Students are empowered to offer feedback on course content directly to Coursera, with 11 students taking advantage of this opportunity, resulting in an impressive average satisfaction rating of 4.7 out of 5 across all pathways.

Delving deeper into the tangible outcomes, a student in the Cybersecurity program successfully completed the Cybersecurity EEP, obtaining their Google Cybersecurity certificate in Summer 2025. This achievement not only enhanced the student's skills and practical experience but also bolstered their resume, helping them secure a traditional co-op position in Infrastructure and Cloud Technology at 84.51, a Kroger company, for the Fall 2025 semester. In reflecting on their experiences, another Cybersecurity student highlighted the strengths of consistency and time management cultivated during the EEP semester, emphasizing the dedication and meticulous planning that contributed to a seamless workflow: "One strength was consistency; I got on and did 5 hours of work every day and sometimes even worked on the weekends. Another skill I demonstrated was time management; I planned out almost the whole summer just to make it that much easier and it made the [EEP] flow smoothly."

Another student who completed the IT Support EEP shared their growth in confidence and the importance of collaboration in achieving collective project goals efficiently, recognizing the value of leveraging others' expertise for mutual success: "As I gained confidence, I had a tendency to want to own a task completely. I plan to improve by consciously seeking opportunities to collaborate and split components of larger projects, trusting others; expertise to achieve a collective goal more efficiently."

The integration of EEP with Coursera has not only transformed the learning experience for Information Technology and Cybersecurity students but has also paved the way for concrete skill development, industry-relevant certifications, and improved workplace readiness. Through personalized pathways, valuable feedback mechanisms, and real-world application of acquired knowledge, students have not only refined their technical abilities but have also nurtured essential soft skills, boosting their confidence and preparedness for the dynamic demands of the technology industry. This innovative approach to experiential learning has truly empowered students to excel and thrive in their academic and professional pursuits.

RECOMMENDATIONS FOR PRACTICE

Course Instructors and Alternative Work Experience Leaders

The University of Cincinnati's School of Information Technology (SoIT) offers undergraduate programs in information technology, cybersecurity, and software application development. Information Technology majors choose from three curriculum tracks: game development and simulation, networking/systems administration, and data technologies. All full-time students, regardless of track, must complete a co-op. Most students enter co-op after one year of coursework, though some bring prior learning from high school, industry experience, or industry-recognized credentials. To support this range of preparation, co-op faculty advisors developed beginner and intermediate level Coursera micro-credentials, aligning upskilling pathways with the SoIT curriculum, student interests, and industry and market trends.

The hiring market is continuously changing, and micro-credentials are a way that course instructors and alternative work experience leaders can respond to changing demands. According to Handshake, an online career networking platform, technology internship postings declined by 30 percent between January 2023 and January 2025 (Handshake, 2025). From industry, skills are also changing. According to industry, the skills needed to be competitive in the technology job market are rapidly changing (World Economic Forum, 2025). Coursera's job skills report (2024) identified the top ten technology skills, of which half are cybersecurity skills, yet 3.4 million cybersecurity jobs go unfilled worldwide (Coursera, 2024). Coursera micro-credentials can be intentionally mapped to competencies (e.g., technology plus critical thinking via labs/assessments, and communication plus professionalism via reflection artifacts) thereby strengthening students' employability narratives and providing evidence that directly matches employer expectations (NACE, 2024; NACE, 2025a, 2025b).

As noted earlier, students are allowed to opt into one of five faculty-designed EEP Coursera tracks or customize their own. Students who secure experiences only partially fulfilling EEP requirements, such as part-time or project-based work, are also permitted to select specific Coursera programs. For example, a past student who secured a part-time co-op experience wanted to improve their programming skills, so supplementing part-time work with Microsoft's Python Development program was ideal. Not all EEP participants choose the program due to difficulty securing a traditional co-op. Some, having already secured post-graduation employment, use EEP to customize their experience with Coursera programs aligned to their future roles.

This model of flexibility and customization can be duplicated at other universities by aligning micro-credential pathways with existing curricula, industry needs, and student career goals. By offering both structured options and customizable experiences, institutions can address gaps caused by shifting labor markets while also enhancing students' employability and career readiness quickly through micro-credentials vs. changing university curriculum, which is usually a lengthy and laborious process.

Career Education Practitioners

Career education professionals face increasing pressure to prepare students not only with theoretical knowledge but also with practical, industry-relevant skills. Digital skills training programs, including micro-credentials and competency-based modules, have emerged as a powerful mechanism to bridge the gap between academic curricula and employer expectations (Baker, 2020; Feija et al., 2021). By engaging students in structured digital learning pathways, even if your institute can't afford toolkits like Coursera, career education professionals can enhance student readiness for technology-driven roles, ensuring graduates possess both the technical expertise and applied competencies valued by employers.

One key benefit of digital skills programs is their alignment with industry standards and workforce needs. Unlike traditional coursework, these programs often focus on specific, high-demand skills such as data analytics, cybersecurity, software development, and digital collaboration (Brynjolfsson & McAfee, 2014). When students complete these programs, they frequently earn micro-credentials or digital badges that serve as verifiable indicators of proficiency. These credentials provide tangible evidence (e.g. certificate, digital badge) students can apply knowledge in real-world contexts, bridging the traditional divide between academic performance and workplace competence (Oliver, 2019). Moreover, integrating digital skills programs into co-op and work-integrated learning (WIL) pathways has been shown to improve student engagement and adaptability, particularly in rapidly changing work environments, as highlighted during the COVID-19 pandemic (Alanson et al., 2020).

Furthermore, micro-credentials and digital certifications enhance student visibility to potential employers. As hiring

practices increasingly leverage digital recruitment platforms (e.g., applicant tracking systems), students who hold recognized certifications can be identified more readily as qualified candidates for internships, co-op placements, and full-time positions (Tamoliune et al., 2023). For career education professionals, integrating digital skills programs into institutional advising and experiential learning initiatives not only increases student employability but also reinforces the institution's reputation for producing workforce-ready graduates.

The integration of digital skills training and micro-credentialing into higher education curricula offers significant benefits for students and institutions alike. These programs equip students with industry-relevant skills, provide validated evidence of competence, and enhance employability in competitive job markets. Career education professionals play a critical role in facilitating access to these opportunities, ensuring that graduates are prepared to meet evolving employer expectations and succeed in technology-driven careers.

Institutional Leaders and Administrators

The rapid evolution of technology and digital platforms has reshaped the landscape of higher education, creating both opportunities and challenges for institutional leaders seeking to prepare students for the workforce. Among these challenges is the integration of digital upskilling pathways into traditional co-op curricula and the connection to careers. Kolb (1984) said, "the experiential learning model pursues a framework for examining and strengthening the critical linkages among education, work, and personal development" (p. 14). Although this initiative may seem daunting amid growing public pressure on U.S. higher education to deliver results, it is essential to align experiential learning with modern career demands and ensure students receive a strong return on their investment in a degree. Co-op and work-integrated learning (WIL) are undergoing a profound transformation, moving beyond the traditional model of alternating academic and work terms to embrace broader, more flexible forms of experiential education (Coll & Zegwaard, 2018; Alanson et al., 2020). In this evolving context, administrators must thoughtfully consider innovative approaches to co-op that respond to the dynamic needs of students and employers alike.

A critical first step for institutional leaders is the adoption of intentionally flexible policies that redefine the parameters of co-op or WIL. Traditional, narrowly defined criteria for acceptable program formats can inadvertently constrain innovation, forcing faculty and administrators into rigid interpretations that may no longer reflect the realities of modern professional practice (Jackson, 2015). Instead, higher education institutions should embrace policies that account for iterative changes in the WIL landscape. As society increasingly integrates artificial intelligence, digital collaboration tools, and other emergent technologies into the workplace, experiential learning models must also evolve. Ten years from now, the definition of co-op is likely to diverge significantly from today's understanding, underscoring the need for foresight and adaptability in policy development (Gault, Leach, & Duey, 2010).

The global landscape of digital skills programs has expanded dramatically in recent years, creating a highly competitive and rapidly evolving industry. Institutions now pay to have access to a wide range of online platforms, micro-credentialing systems, bootcamps, and modular programs developed by universities, private companies, and international organizations (Baker, 2020; Radermacher & Walia, 2021). These opportunities vary in price depending on the number of users and content accessibility. This growing ecosystem offers opportunities for students to acquire in-demand skills in areas such as cybersecurity, data analytics, software development, and digital literacy, often with flexible delivery formats accommodating diverse learner needs. However, the proliferation of programs also introduces significant challenges for administrators tasked with evaluating quality, relevance, and alignment with institutional goals.

Educational leaders must carefully vet potential digital skills programs to ensure they fit both the mission and the resources of their institution. Factors for consideration include program credibility, alignment with labor market demand, faculty capacity to integrate digital content into existing curricula, cost-effectiveness, and technological infrastructure requirements (Oliver, 2019; Radermacher & Walia, 2021). Without a deliberate and research-based selection process, institutions risk investing in programs that fail to meet the educational needs of students or produce meaningful workforce outcomes. Strategic partnerships with reputable providers and evidence-based evaluation metrics can mitigate

these risks, enabling administrators to adopt digital upskilling pathways that are both innovative and sustainable.

The competitive environment of digital learning platforms further underscores the urgency for higher education institutions to invest in digital upskilling initiatives. When effectively integrated, these technologies can transform traditional workflows, enabling faculty and staff to deliver more personalized, competency-based learning experiences while simultaneously tracking and demonstrating student outcomes (Brynjolfsson & McAfee, 2014). However, successful adoption requires more than technological infrastructure—it demands leadership committed to cultural change, professional development, and strategic alignment across academic and administrative units (Baker, 2020).

Institutional leaders must also recognize the strategic value of partnerships with employers and industry stakeholders. By aligning digital skills programs with workforce needs, institutions can provide students with relevant, experiential learning that directly enhances employability (Ferns & Neill, 2018). These partnerships enable a feedback loop in which emerging skills trends inform curriculum development, ensuring that co-op remains both current and impactful. Moreover, embedding digital upskilling into co-op pathways can foster equity by broadening access to high-demand skills for diverse student populations, including those who may face barriers to traditional work-term placements (Oliver, 2019).

Overall, the integration of digital skills programs into higher education co-op curricula represents a complex but essential evolution. By adopting flexible policy frameworks, leveraging emerging digital platforms, carefully vetting programs for quality and alignment, and fostering industry partnerships, institutional leaders can ensure WIL remains responsive to the changing demands of the workforce. In doing so, higher education can position itself as a catalyst for both student success and societal advancement, preparing graduates not only for the jobs of today but for the rapidly evolving careers of tomorrow.

CONCLUSION

This case study and practical applications article demonstrates how embedding Coursera and LinkedIn Learning micro-credentials within co-op and alternative experiential programs meaningfully enhances student preparation for evolving workforce demands. In the two case studies presented, students not only gained technical proficiency and professional competencies but also acquired verifiable credentials serving as tangible evidence of employability. Importantly, the choice-based design of UC's implementation fostered learner agency, personalization, and deeper engagement. Equally significant was the integration of micro-credentials into existing curricular structures, which ensured accountability, reflection, and coherence without imposing substantial additional workload on faculty.

At an institutional level, this initiative underscores the importance of policy flexibility, strategic partnerships with reputable providers, and intentional scaffolding of digital learning within established experiential frameworks. These elements collectively illustrate how institutions can scale micro-credential integration in ways both sustainable and pedagogically sound. The broader implications for higher education extend beyond Information Technology and Cybersecurity. As technological, economic, and social forces accelerate change across disciplines, micro-credentials offer a portable and adaptable mechanism to keep experiential learning current with labor market realities. Moreover, their use can advance equity by expanding access to industry-aligned skills for students who face barriers to traditional placements.

Moving forward, we encourage faculty and administrators to work together to pilot, adapt, and rigorously evaluate micro-credential integration, with particular attention to student outcomes, employer feedback, and instructional practices. While still an emerging practice, micro-credentials hold considerable promise as a complement to experiential learning across fields. By adopting them strategically, institutions can strengthen their role in preparing graduates across all majors who are not only workforce-ready but also equipped for resilience and lifelong learning.

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