**Track:** Microcredentials

**Title:** Embracing Educational Advancement: Harnessing Microcredentials and Digital Badges to Unlock Opportunities: An Intended Impact for Universities

**Presenter:** Harika Rao

**Abstract:**

Higher education in the United States is at unique cross-roads with declining enrolment, artificial intelligence, and rapidly evolving job market making continuous learning indispensable (Blake, 2024). While the traditional format of teaching and learning has worked its magic for decades, it is time for higher education institutions to re-develop the curriculum to incorporate employable skills through the use badges and microcredentials. Conventional credentials may not always equip individuals with the precise skills demanded. Microcredentials and digital badges represent pioneering solutions. This article explores their significance in higher education, their innovative nature, their influence, and methods for assessing their effectiveness.

The purpose of this paper is to draw the attention of educators towards microcredentials to bridge the employability gap through curriculum changes. Implementing microcredentials in the curriculum is an efficient way to encourage and motivate students to learn to hone their skills. The Massive Open Online Access (with microcredentials or digital badges) has been a successful model for alternate credentials for employees. These digital badges are a welcome addition to LinkedIn (Certify, 2023).

**Introduction**

Microcredentials are competency-based learning models provided by higher education or business which issue learners with a digital badge upon completion (Alamri et al., [2021](https://link.springer.com/article/10.1007/s10639-023-11739-z#ref-CR6)). Digital badges are therefore a specific form of Microcredentials, providing a visual representation of Microcredentials completion and a proof of learning or evidence of acquired skills (European\_Commission, [2020](https://link.springer.com/article/10.1007/s10639-023-11739-z#ref-CR32); Oliver, [2019](https://link.springer.com/article/10.1007/s10639-023-11739-z#ref-CR65)).

Microcredentials and digital badges provide a flexible and affordable way for students to acquire relevant skills and knowledge throughout their lives. They also support lifelong learning, which is essential in the rapidly changing world we live in. This benefits both learners and employers, as it helps to create a skilled and adaptable workforce. The following sections discuss the various aspects of the topic.

**The Problem/Need Addressed:**

The problem that microcredentials and digital badges address is twofold:

1. Rapid Skill Obsolescence: Traditional degree programs often struggle to keep up with the constantly changing skills required in the workforce.

2. Diverse Learning Pathways: Some seek just-in-time training, while others may already have a degree but need to acquire specific skills.

**Innovative Solution:**

Higher education can use the following methods as an innovative solution to the problem:

1. Granular Competency Assessment: Microcredentials are designed to be granular, focusing on specific skills or knowledge areas allowing learners for personalized learning pathways.

2. Online and On-Demand: These credentials are typically delivered online, making them accessible to a global audience.

3. Stackability: Microcredentials can be stacked to build a comprehensive, skill-based profile. This stackability allows learners to show their continuous skill development, increasing employability.

4. Industry-Relevant: Microcredentials are often developed in partnership with industry experts, ensuring that the skills taught are aligned with real-world needs.

***Case Studies:***

Harvard University's Extension School offers a wide range of microcredentials through their Harvard Extension School Micro-credential and Digital Badge program.

IBM has implemented digital badges that have increased engagement and skill development among employees.

Deakin University's FutureLearn Partnership: Deakin University in Australia has partnered with FutureLearn to offer microcredentials.

**Impact on Universities’ or Intended Impact:**

Microcredentials and digital badges have the potential to transform campuses and learning institutions in several ways:

1. Accessible Lifelong Learning: Campuses become hubs for accessible lifelong learning with diverse learning platforms.

2. Industry Partnerships: Educational institutions can forge closer ties with industries, ensuring that what they teach remains relevant and aligns with real-world needs.

3. Enhanced Employability: The granular nature of microcredentials equips learners with immediately marketable skills, making them more employable in a competitive job market.

Impact on campus currently at Lynn University, Boca Raton, Florida

1. The researcher implemented badges and Microcredentialing in one undergraduate and graduate course in the College of Business and Management. The implementation has been successful and looking forward towards a co-curricular transcript to benefit students across the university.
2. Successful implementation of Career Development and Preparation courses in the undergraduate curriculum with certification and looking ahead in the next academic year towards Micro credentialing along with co-curricular transcript will provide a better sense of understanding and holistic use of badges and microcredentials, adding value to its use in higher education.

**Measuring the Impact:**

Measuring the impact of microcredentials and digital badges on campuses is crucial. Here are some methods:

1. Learner Outcomes: Learner outcomes, such as job placements, promotions, and salary increase, can be monitored to gauge effectiveness of the programs.

2. Enrolment Data: Analysis of enrolment data to track the adoption of microcredentials and the shifting demographics of the student body are other metrics.

3. Feedback from industry and learners: Periodical feedback on the preparedness and skills of graduates can help tailor offerings to industry and learners’ needs and expectations.

4. Cost-Benefit Analysis: Evaluating the financial implications of integrating microcredentials can be an important performance measure.

**Accreditation:**

Accrediting bodies have policies defining microcredentials and ways to be in compliance with the policies. Universities can refer to their respective accrediting rules to ensure the implementation is appropriate**.** An example of the policy from the Southern Association of Colleges and Schools Commission on Colleges, USA is “For accreditation purposes, “non-degree credentials” include a variety of programs offering narrowly focused areas of study where learners demonstrate mastery of knowledge, skills, abilities, and/or competencies. A non-degree credential typically covers more than a traditional three-four credit hour course but less content than a full degree. Non-Degree Credentials vary in content, instructional level (associates, baccalaureate, masters, etc.), length, method of instructional delivery, credit awarded, and professional or occupational focus. They may be offered “for-credit” or “not-for-credit. The method of instructional delivery may be via distance education, in person, or through a combination. In all cases, the academic rigor of non-degree credentials matches the quality of other institutional credentials, regardless of whether academic credit is awarded for instruction provided by the institution, awarded for external credit (i.e., by transfer of credit from another institution), or awarded for credit through a collaborative academic arrangement.” (SACSCOC, 2024).

**Conclusion**

Microcredentials and digital badges are transforming education by meeting the rising demand for lifelong learning and skill development. They offer a flexible, granular, and industry-aligned solution that can make education more accessible, relevant, and diverse on campuses. Measuring the impact of these innovations is essential to ensure that they are fulfilling their potential and reshaping the higher education landscape.

**Session Format**: Presentation

**References**

Alamri, H. A., Watson, S., & Watson, W. (2021). Learning technology models that support personalization within blended learning environments in higher education. *TechTrends,* *65*(1), 62–78.

Blake, J. (2024). Doubts About Value Are Deterring College Enrollment. <https://www.insidehighered.com/news/students/retention/2024/03/13/doubts-about-value-are-deterring-college-enrollment>

Certify. (2023). The importance of digital badges. <https://www.linkedin.com/pulse/importance-digital-badges-certify-digital-credentials-r1hme/>

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From Game Design Elements to Gamefulness: Defining "Gamification". In Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments (pp. 9-15). ACM.

European\_Commission. (2020). *Final Report: A European Approach to Micro-Credentials. Output of the Microcredentials Higher Education Consultation Group.* <https://ec.europa.eu/education/sites/default/files/document-library-docs/european-approach-microcredentials-higher-education-consultation-group-output-final-report.pdf>. Accessed July 2021.

FutureLearn. (n.d.). Deakin University. https://www.futurelearn.com/partners/deakin-university

Harvard Extension School. (n.d.). Micro-credential and Digital Badge. Harvard University. https://www.extension.harvard.edu/academics/professional-graduate-certificates/micro-credential-and-digital-badge

IBM. (n.d.). IBM Digital Badges. <https://www.ibm.com/services/learning/ites.wss/zz/en#/content/IBM_SkillBadges>

Oliver, B. (2019). Making micro-credentials work for learners, employers and providers. dteach.deakin.edu.au/microcredentials.

SACSCOC. (2024). Non-Degree Credentials. <https://sacscoc.org/app/uploads/2024/03/Non-degree-Credential-Guidance.pdf>