

# Chapter 6

## Alternative Digital Credentials in Higher Education: Bridging the Skills Gap Through Workforce, Employer, and Education Partnerships

**Courtney Breckenridge**  
*Southern Illinois University,  
Edwardsville, USA*

**Mary Ettling**  
*Southern Illinois University,  
Edwardsville, USA*

**Tony Fuhrmann**  
*Madison County Employment and*

*Training, USA*

**Robert P. Dixon**  
*Southern Illinois University,  
Edwardsville, USA*

**Wyatt E. Bridger**  
*Southern Illinois University,  
Edwardsville, USA*

### ABSTRACT

*Alternative digital credentials (ADCs), also known as digital badges, demonstrate great promise as a strategy for closing the skills gap and supporting the alignment of industry skills with traditional and nontraditional higher education programs. The authors seek to highlight advances in ADC development in a public university setting, demonstrating how higher education institutions can weave ADCs into both traditional classrooms and larger community initiatives such as workforce development and non-credit offerings. The chapter details the institution's ADC pathway from conception to a workforce development project awarded in response to the COVID-19 pandemic including key project objectives, strategies, and best practices. The authors also discuss the use of existing learning resources and tools such as EMSI, Jove, and augmented reality technology, including learner reviews from current program participants. Finally, institutional strategies for prior learning assessment and integration of digital badges into undergraduate degree programs are discussed.*

DOI: 10.4018/978-1-7998-7697-7.ch006

## **INTRODUCTION**

Alternative digital credentials (ADCs), including digital badges, microcredentials, or other forms of non-credit digital certificates, demonstrate great promise as a strategy for closing the skills gap and supporting the alignment of industry skills with traditional and nontraditional higher education programs. “Regardless of setting or industry, individuals are often in need of documenting their expertise and skillsets for professional advancement” (Carey and Stefaniak, 2018, p. 1211). Recognizing potential to make a significant impact on both traditional students and community members through careful attention to identifying and providing pathways for individuals to demonstrate competency, Southern Illinois University Edwardsville (SIUE) has made a significant investment in ADCs at the undergraduate and post-baccalaureate level, as well as through a workforce training pilot seeking to rapidly upskill displaced workers through a series of stackable, non-credit ADCs leading to industry-aligned credentials.

## **LITERATURE REVIEW**

Due to myriad factors, including the cost of undergraduate tuition (and resulting student loan debt) and the lack of formal education requirements for many good-paying jobs, an increasing number of students are choosing two-year institutions or entering the workforce in place of pursuing a traditional four-year college education. This also means that at some point in their career, these individuals are likely to hit a figurative wall in terms of salary and skills. Alternatively, those who earn a four-year degree may still find themselves struggling in their entry, and even mid-level positions after graduation (Casilli and Hickey 2016). This creates an opportunity for ADCs as a pathway to increased wages and career mobility.

“Badges” have been around for years. From knights displaying valiant emblems of bravery to the Boys and Girls Scouts of America proudly supporting patches on a sash, these symbols show the owners accomplishment and ability in certain areas or skills (Gibson et al. 2015). However, the concept of ADCs does face some opposition. Those against the usage of ADCs in higher education find themselves questioning if these credentials defeat the purpose of a traditional degree (Stefaniak and Carey 2019). The answer to the question is simple and is answered with another question. What are traditional credentials and how are they any more trustworthy? Despite the history of accreditation, the trust we have put in accrediting coursework where potential employers cannot even view what was covered in a course is categorized as murky at best (Casilli and Hickey 2016).

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/alternative-digital-credentials-in-higher-education/292663](http://www.igi-global.com/chapter/alternative-digital-credentials-in-higher-education/292663)

## Related Content

---

### The Role of Mobile Learning in Developing Employability and Job-Related Skills at VTET Programs

Ahmed Mokhtar Abdelaziz (2022). *Research Anthology on Vocational Education and Preparing Future Workers* (pp. 569-592).

[www.irma-international.org/chapter/the-role-of-mobile-learning-in-developing-employability-and-job-related-skills-at-vtet-programs/304507](http://www.irma-international.org/chapter/the-role-of-mobile-learning-in-developing-employability-and-job-related-skills-at-vtet-programs/304507)

### The Alignment of Civil Engineering Tools and Equipment Between TVET Colleges and Industries: The Preparation of Industrial Contemporary Skills Required for the 4IR Era

Thokozani Isaac Mtshaliand Sylvia Manto Ramaligela (2022). *Research Anthology on Vocational Education and Preparing Future Workers* (pp. 219-234).

[www.irma-international.org/chapter/the-alignment-of-civil-engineering-tools-and-equipment-between-tvet-colleges-and-industries/304486](http://www.irma-international.org/chapter/the-alignment-of-civil-engineering-tools-and-equipment-between-tvet-colleges-and-industries/304486)

### Youth Participation in the National Development Plan Through Technical and Vocational Education and Training: The Case of Young Black Women in South Africa

Johannes Ntshilagane Mampane (2022). *Research Anthology on Vocational Education and Preparing Future Workers* (pp. 869-882).

[www.irma-international.org/chapter/youth-participation-in-the-national-development-plan-through-technical-and-vocational-education-and-training/304523](http://www.irma-international.org/chapter/youth-participation-in-the-national-development-plan-through-technical-and-vocational-education-and-training/304523)

### The Alignment of Civil Engineering Tools and Equipment Between TVET Colleges and Industries: The Preparation of Industrial Contemporary Skills Required for the 4IR Era

Thokozani Isaac Mtshaliand Sylvia Manto Ramaligela (2021). *New Models for Technical and Vocational Education and Training* (pp. 29-48).

[www.irma-international.org/chapter/the-alignment-of-civil-engineering-tools-and-equipment-between-tvet-colleges-and-industries/268440](http://www.irma-international.org/chapter/the-alignment-of-civil-engineering-tools-and-equipment-between-tvet-colleges-and-industries/268440)

## Enhancing the Skill Sets for Increasing Youth Employability in Latvia

Ineta Luka, Tamara Pigozne and Svetlana Surikova (2022). *Research Anthology on Vocational Education and Preparing Future Workers* (pp. 255-281).

[www.irma-international.org/chapter/enhancing-the-skill-sets-for-increasing-youth-employability-in-latvia/304488](http://www.irma-international.org/chapter/enhancing-the-skill-sets-for-increasing-youth-employability-in-latvia/304488)