#### **DIGITAL CREDENTIALS SUMMIT 2018: HIGHLIGHTS**

#### **Betty Hurley**

SUNY Empire State College Address all correspondence to: Betty Hurley, SUNY Empire State College, 113 West Avenue, Saratoga Springs, NY Email: betty.hurley@esc.edu



#### Abstract

The area of digital credentialing is in rapid development. Impressive progress has been made in the past year in utilization of the new standard, Open Badges 2.0. Examples of digital credentialing are gaining reach and sophistication. This article, based on presentations given at the IMS Global Summit on Digital Credentialing held in Scottsdale, Arizona, in February, 2018, looks at the current status of digital credentialing.

KEY WORDS: microcredentials; open badges; digital credentials; competencies

#### **1. INTRODUCTION**

In an earlier edition of IJOIE, the article, *Open Badges and Alternative Credentialing* (Hurley, IJIOE, 2017), discussed the background on the why and how of digital badging. During the past year, there have been major developments in the area and many of these developments were presented at the Digital Credentials Summit sponsored by the IMS Global Learning Consortium in Scottsdale Arizona on February 27–28, 2018. This article presents highlights of that summit and will discuss future directions in the support and continued acceptance of digital credentialing in educational and professional circles.

#### 2. BACKGROUND

Much of the foundational work in the area of digital badging was facilitated by the web browser Mozilla, through the Mozilla Open Badges Project. Since 2016, the project has

been led by IMS Global. A key event in 2017 was the announcement of Open Badges 2.0 (https://www.imsglobal.org/activity/digital-credentials-and-badges), a second installment of standards that are essential for the continued growth in digital badging. All key players in the digital credentialing area have adopted Open Badges 2.0. At the recent summit, along with sharing new implementations and developments, a panel of vendors discussed how they are functioning with Open Badges 2.0. Open badges (Fig 1) have revolutionized how credentialing material is documented.



**FIG. 1:** Open Badges paint a better picture by @bryanMMathers (https://bryanmmathers. com/open-badges-paint-a-better-picture/) is licensed under CC-BY-ND

### **3. COLLEGE DISRUPTED**

At the summit meeting, Ryan Craig, author of *College Disrupted* (2015), discussed the new four Rs of higher education: research, rankings, real estate, and rah (sports). He believes that many colleges and universities are not meeting the needs of learners. About 50% of college graduates are underemployed, and 71% of companies now say they will consider alternatives to the Bachelor degree in reviewing applicant credentials. American students currently owe \$1.3 trillion in loans for higher education.

Craig described how the traditional way of "doing college" is being disrupted. Bootcamps, primarily to learn coding, are increasing in number. An innovative disruptor is MissionU (http://www.missionu.com/), which provides an intense immersive one-year Bachelor

degree in data analytics. Students accepted by the program pay no tuition; however, once their salary from post-degree employment reaches \$50,000 per year or higher, the student pays MissionU 15% of their salary for 3 years, with the amount paid not to exceed \$45,000. There were 5000 applicants for the first cohort of 30 students, indicating a high interest in students to participate in an innovative program such as MissionU.

Other companies serving as talent developers are surfacing. Revature (https://revature.com/) contracts with employers who pay for the training of promising learners with the understanding that these learners will then become employees. Revature also contracts with universities, providing free online learning to students at these partner universities.

Another speaker, Ryan Davis, of Corporation for a Skilled Workforce [(CSW) (http://skilledwork.org/)] presented some disturbing statistics, such as 37 million Americans having some college credit but no degree. CSW is in the fifth year of managing the Lumina-funded Connecting Credentials Project. This project (http://connectingcredentials. org) identifies the competencies underpinning credentials, educational programs and work, establishing common language, and delineating levels of proficiency to describe what people who have mastered these competencies know and are able to do. CSW is a strong supporter of competency-based learning. According to Craig, "Competency is the new currency."

### 4. RECENT APPLICATIONS OF DIGITAL BADGING

During the summit, attendees heard about programs at a number of colleges and universities. Each was a potential model for other ventures.

### 4.1 STLR: University of Central Oklahoma

The University of Central Oklahoma has developed Student Transformative Learning Record [(STLR) (http://sites.uco.edu/central/tl/stlr/)], which utilizes ePortfolios and badging to document and encourage transformative learning. Through STLR, students develop skills in an evidence-based fashion. Badges are given for three levels: exposure, integration, and transformation. An example of the exposure level is attending a workshop on sustainability. For higher levels, students demonstrate how they have achieved higher understanding of the topic, as assessed by rubrics based on the American Association of College and Universities (AAC&U) VALUE Rubrics (https://www.aacu.org/value/rubrics). Their ePortfolio system, D2L, provides the environment for reflection, as well as documenting students' achievements through badges. Students can then package their badges to share with potential employers. More information on this exciting project will be shared in a later article.

# 4.2 USNH College for America

Ryan Davis and Ryan Craig both spoke about the potential for competency-based education. University of Southern New Hampshire's College for America Program not only has fully competency-based programs, but works closely with companies to make sure the competencies match the needs of the workplace. Programs in health care management, management, and communications focus on the development of skills that are immediately usable in the workplace. Industry partners include McDonalds, Aetna, Dunkin Donuts, and Life Is Good. USNH is also experimenting with using blockchain technology for credentialing the College for America Program. Blockchain technology allows networks to share information that is instantly compiled into a database that is updated in real-time.

# 4.3 Colorado Technical University

Heather Sharbaugh, Director of Academic Records at Colorado Technical University, shared their use of formative digital badges for some academic degrees. In addition, through Parchment, students are able to obtain a digital diploma that they can share through LinkedIn and Facebook. (https://www.youtube.com/embed/AEoJP\_RWvGY).

# 4.4 Colorado Community College System

Michael Macklin (Twitter handle: @michaelpmacklin), Associate Provost for Workforce Development/Partnerships at Colorado Community College System, spoke of a partnership with Credly to provide badges for students (https://www.cccs.edu/educator-resources/badges/). The mapping, or connecting of competencies to curriculum, is completed through a Competency Crosswalk. Their hierarchy of badging allows for current information about a person's competencies to be easily accessible to potential employers Badging has also allowed for consistency across the many community colleges in the system.

# 4.5 21st Century Skill Badges

Kathleen Delaski, founder and president of Education Design Lab (https://eddesignlab.org) shared information about one of their projects, 21st Century Skill Badges. The eight badges offered by their organization are for proficiencies in: Initiative, Collaboration, Creative Problem Solving, Critical Thinking, Intercultural Fluency, Empathy, Oral Communication and Resilience. Each skill has four sub-competencies that comprise the badging requirements. There is a performance-based assessment associated with each of the sub-competencies that must be completed for the awarding of the badge. Badgr is the platform for these badges, which allows for actual stacking of the badges through their Pathways platform, which will be described in a later section of this article. The

assessment of each of these badges was built in collaboration with higher education partners.

The badges are now available through Badgr after 4 years of development. George Mason University, which was the partner for the Resiliency badge, is now awarding it to students who successfully complete a five-session workshop. The workshop counts toward the Patriot Experience Well-Being Pathway, which is an "outside the classroom" learning experience to help students build well-rounded, healthy lives. (https://patriotexperience.gmu.edu/well-being/)

Another project in which the 21st Century Skill badges are being used is with the Academy of Hope, an adult charter school in Washington, DC. Learners are given an opportunity to gain their GED as well as developing skills to enter the hospitality industry. Partners include Hilton, Hyatt and Marriott hotels, SUNY Empire State College, and Edgewood/Brookland Family Support Collaborative. The pilot group of students began in April 2018. The badging offers not just experience, but credentialing to assist students in finding employment. (https://eddesignlab.org/2017/12/launching-new-pathways-dc/)

#### **5. CORPORATE PROVIDERS**

Two corporate providers were highlighted at the summit for their use and implementation of badging: IBM and Microsoft. Both companies use the Acclaim platform to award badges to those who pass their certification exams. Acclaim (formerly part of Pearson VUE, now owned by Credly) describes itself as the open badge platform for employment competencies. In addition to Microsoft and IBM, Acclaim is the badging platform for companies such as Adobe, GED Testing Service, Arizona State University, CISCO, and Oracle.

### 5.1 Microsoft

Microsoft provides badges to customers who use its online training for product use, as well as to employees to recognize achievements and expertise. There are three kinds of badges: Activity, Knowledge, and Validated Skills and Certifications. The last category is for successful completion of any activity that has a rigorous validation by Microsoft.

#### 5.2 IBM

IBM now has a *Your Learning* platform for its employees in order to display badges earned. *Your Learning* also recommends badges based on the employee's profile. In addition, IBM provides training and badges free to anyone through https://ibm.com/training on topics such as cloud technology, finance and security. Courses specific to data science are available at https://cognitiveclass.ai. Some courses are embedded in learning paths,

such as data visualization. Since moving to this platform using Acclaim to provide badges, IBM has seen a threefold increase in enrollments and completions.

### 6. PRIMARY PLATFORM PROVIDERS IN DIGITAL BADGING

At the summit, four major platform providers dominated the market: Concentric Sky (Badgr), Credly, Pearson (Acclaim), and Chalk & Wire (MyMantl). However, in April, 2018, Credly acquired Acclaim, so these will be discussed together. In addition, DigitalMe is a primary platform provider in the European market.

### 6.1 Concentric Sky (Badgr)

Concentric Sky (Badgr) serves as an issuer, displayer, and host for open badges. The company works on projects with partners such as EdX and the World Bank. They have been involved with open badges since the beginning and, from 2015 to 2017, served as stewards of the Badge Alliance, working on the development and documentation for Open Badges 2.0 until IMSGlobal took the standards over in 2017. Although Concentric Sky is no longer involved in standardizing badges, they are still active players in issuing and displaying badges for users.

Badgr is the space where individuals can store their open badges. There is no charge for individuals to store their badges and the platform can be any issuing platform, not just Badgr. Concentric Sky has recently created a new open learning standard called Open Pathways, which allows one to create learning pathways and align badges to them. Badgr Pathways provides a user-friendly environment for learners to see the path they need to take to earn a credential, and for issuers to lay out clearly the pathway to a credential.

For the issuer, Badgr Pathways allows for selection of multiple badges drawn from a searchable database that meet each of the competencies. Through Pathway, badges can be stacked, meaning that one cannot obtain a new badge until all the previous badges have been completed in that category. Concentric Sky is working with the California Community College System to develop pathways for their degrees and certificates. These pathways will provide students choices on courses and badges to complete the competencies needed for the degree or certificate. All of this information is available online. The 21st Century Skills badges developed by Education Design Lab are already available in Badgr pathway and can be easily built into a Pathway.

Further information about projects by Concentric Sky will be provided in a subsequent article.

# 6.2 Credly (including Acclaim)

Credly is an issuer and displayer of open badges. One project discussed at the summit provides a recognition center for Bellevue University, where students can claim badges for

areas such as "Professional Retail Sales & Management" based on training provided by Verizon.

Credly is also working with American Council on Education (ACE) on a Lumina-funded project that will continue until 2019 (https://workingtranscripts.credly.com/). The initiative is designed to enable the recognition of learning and skill-development, regardless of where it occurs, using portable digital credentials. The grant will fund the creation of a scalable process to record the outcomes of training programs as discrete competencies, and will provide individuals with access to portable, digital, verified credentials. It will also support the creation of a machine-readable official "transcript" of on-the-job skills that can be easily shared with colleges and universities for academic credit, or with current and future employers as a verified résumé of one's knowledge, skills and abilities. Currently, ACE has partnered with Credly to issue credentials for companies such as Disney.

Credly's acquisition of Acclaim from Pearson has moved Credly even further as a leader in business credentialing. Both IBM and Microsoft use the Acclaim platform. One project recognizes IBM badges in project management as part of a Masters degree in Project Management at Northeastern University.

### 6.3 Chalk & Wire (MyMANTL)

Another company that issues, displays, and hosts open badges is Chalk & Wire through their product, MyMANTL. Individual users can add their badges to MyMANTL for free. Through an ePortfolio system, they can store examples of their work. Institutions pay a fee for the service for over 10 users. Along with storing student information, institutions can issue badges. MyMant's innovative program builder also offers organizations a way to construct a digital skills superstructure to support and frame degrees, diplomas, and certificates. (https://mymantl.com/?utm\_source=chalk-wire-website&utm\_medium=popup& utm\_term=mymantl-release-popup-cw)

## 6.4 Digitalme (makewav.es, Open Badge Academy and digitalme.credly)

Digitalme is a part of the City and Guilds Group in Europe. Their products for issuing and displaying open badges are makewav.es, Open Badge Academy, and digitalme.credly. These products enable organizations to design and issue badges. One example is iDEA (http://idea.org.uk), a program that helps learners to develop digital and enterprise skills for free. After completing online challenges, the learners are then awarded badges that can be used to prove expertise to potential employers.

#### 7. NEXT STEPS

The next steps concern the technical aspects of digital credentials. Open Badges 2.0 has greatly increased the information that can reside within a digital badge. Badgr Pathways

pulls that information to help institutions and learners create individual pathways to meet their goals.

Southern New Hampshire University is the first university to experiment with blockchain technology. Learning Machine (https://www.learningmachine.com) has worked with SNHU on implementing a transcript for College of America students. Because the blockchain technology permits transmitting of verifiable documents peer-to-peer, higher educational institutions will no longer be the sole source of official documentation of learning. As with the bitcoin, we are too early into this venture to predict even the foreseeable future.

The digital badge idea began with the "Mozilla backpack." Recently, a new open backpack for lifelong learners has been developed, called Open Backpack (www.forallbackpacks. com). Open Backpack allows the owner both to store their digital credentials and to share more easily. Mobile phone access is included.

In his book on unbundling education (2015), Ryan Craig predicts a two-tier system. The financial elite will still be able to afford a bundled four-year experience. Those unable or unwilling to take on the debt required to pay for the bundled experience will choose an increasing number of unbundled options. Will this two-tier system increase the divide between those who are privileged and those who are not? Organizations such as the Digital Education Labs are trying to improve opportunities for those lacking affordable options for higher education.

The area of digital credentials is in a period of rapid development, and efforts are being made to keep users and potential users informed. IMS Global, in conjunction with Madison Area Technical Colleges (MATC) has recently established a Digital Credentials Institute (DCI). According to the web site (https://madisoncollege.edu/continuing-education-badges), "The purpose of DCI will be to provide free and subscription-based research on micro credentials and digital badge programs worldwide. We anticipate that The Digital Credentials Institute, along with IMS Global, will become the authoritative voice in understanding adoption, trends, and topics impacting digital credentials, workforce training and development. DCI will also offer fee-based consultation and education services to employers and institutions (K-20) for program design and implementation."

Since its inception, there has been a strong commitment to maintaining an openness to digital credential development. A subscription is available to an e-mailed *Badge News*, a free newsletter providing current information and ways to connect. It is distributed by *We Are Open Co-op* (https://weareopen.coop). The latest edition is provided in the references.

#### REFERENCES

Craig, Ryan (2015) *College Disrupted: The Great Unbundling of Higher Education.* New York: Palgrave.

Hurley, Betty (2017) *Open Badges and Alternative Credentialing. Int. J. Innovations Online Educ.* Retrieved 04/30/2018 from: http://onlineinnovationsjournal.com/streams/eportfolios-and-prior-learning/0625246a7876598b.html.

We Are Open (2018) *Badge News* #29. Retrieved 06/01/2018 from: https://mailchi.mp/ weareopen/badge-news-issue-29?e=defa228149.