By 2020, 65 percent of all jobs will require some form of postsecondary education, says the Georgetown University Center on Education and the Workforce. However, the official transcript today generally only serves to ‘check off the box’ for employers. It is an assurance that a degree has been earned, rather than a pre-validated measurement of a student’s ability to succeed. Employers often express frustration that the transcript does not provide insight into the skills and competencies students have acquired in and beyond the classroom. Similarly, many graduates express frustration over the static nature of the transcript and its limitations to effectively communicate their skills and experiences to an employer.

To keep pace with today’s digital era, university CIOs and Registrars, technology suppliers, and employers must work together to transform the credential. By innovating credentials, we can drive improvement in workforce-aligned institutional outcomes, help institutions and learners to more effectively work with employers, and empower students to better demonstrate the value of their education credentials and experiences –over a lifetime.

Modern 21st century credentialing isn’t just about being able to present, curate, and transport credentials. It is about the potential for discoverable data under-
neath the credential that can be used to identify talent; talent that builds the workforce we need for the future. Digital credentials should be able to build upon each other, and follow the student—quickly, accurately, and painlessly. That’s why we believe interoperability and portability are critical to the future of the credential. Interoperability enables the sharing of data to help Employers are looking for better ways to identify what a student knows and can do. Transparency in credentials allows universities to more easily offer up indicators of student’s knowledge, skills, and abilities. Today’s students want the ability to speedily share their credentials and to move their credentials to one or more display platforms, social, professional or academic. The transparency is enabled by standardized digital sharing.

### To keep pace with today’s digital era, university CIOs and Registrars, technology suppliers, and employers must work together to transform the credential.

employers find the talent they need and, portability ensures that the learner can easily and securely manage their educational assets.

### PORTABILITY: EMPOWERING STUDENTS TO SHARE CREDENTIALS DIGITALLY

Credentials already offer a degree of portability today, in that they can literally be moved from one place to the other. However, making use of a credential often requires requesting and collecting it from your alma mater, physically printing it, and sending by snail mail or through a closed data exchange network – a process that painfully demonstrates that we have a long way to go to truly reflect today’s digital reality of the open web. Our vision for the future credential includes easy and secure sharing, using only basic Internet resources, so that learners and employers don’t require specialized networks or software to participate. To achieve this suppliers must come together and work with academic institutions through organizations like IMS Global to develop the common data infrastructure that can be certified interoperable.

### WHAT YOU NEED TO KNOW ABOUT INTEROPERABILITY

There are many questions to address as institutions consider interoperability in credentials: How do smaller, more discrete credentials (badges, certificates, micro-credentials) fit together? How does the institution provide opportunities for students tell a full picture of their experience? How do universities and alternative providers align across the sector?

In the modern institution, interoperability is the norm. Student Information Systems (SIS), Learning Management Systems (LMS), digital content providers and online lab tools exchange data seamlessly through the use of certified interoperability standards like LTI™ and Common Cartridge™. Big data has entered the academy with the emergence of Caliper™
for education analytics. These capabilities are made possible through interoperability specifications that offer certification to suppliers. Once certified, the app can be “plug-and-play” with others in the institution’s local environment. With advances in cloud-based computing, that same model is now extended over the Internet, making it possible to share even data easily and securely.

Significant advances have been made toward this vision through the work of the Badge Alliance, the steward of Open Badges formed by Mozilla and the MacArthur Foundation. IMS Global, believing that the concepts and technology underlying Open Badges may be the foundation for the next generation of academic credentials, is currently working on pilot projects to test that hypothesis.

Digital credentials should be able to build upon each other, and follow the student—quickly, accurately, and painlessly.

As our guiding vision, we are moving toward a comprehensive learner record that is digital first, secured and student controlled, and containing a collection of credentials including badges, eTranscripts, and other relevant records the learner chooses to share. This vision is the end game of digital credentialing made possible with today’s existing web technologies coupled with existing and emerging standards of the Badge Alliance and IMS Global.

BUILDING AN INVISIBLE STANDARD

It’s been said that the best standard is an invisible one. But how do you build that standard? For the last year, IMS Global, University of Maryland University College, Capella University, the University of Wisconsin Extension, and others have been collaborating on a project to identify and resolve technical barriers to non-traditional models like Competency Based Education (CBE), with a pilot of a standards-based digital, extended transcript anticipated by the end of the year. The emerging standard supports credit hour academic models as well as a variety of CBE program designs including direct assessment.

Credentialing innovation must be systemic—not limited to academic institutions but across the entire landscape of those who create and consume credentials, including employers and alternative providers. All stakeholders’ need a seat at the table to facilitate and shape a shared understanding of the information that should be included in digital credentials. For example, we and our contributing colleagues are developing an extended transcript prototype based on a framework currently being developed by AACRAO, as well as forming CBE data element dictionary that will align with other systems and projects underway in this space. By committing to open standards and modern linked data structures, the not-so-distant future may involve the widespread discovery of credential-bearing job candidates by recruiters and by automated recruiting platforms, it’s exciting to imagine!

There’s a bit of a grassroots feeling to our efforts, and we are seeing more happening every day with projects such as the Credential Transparency Initiative and
schools like Elon University innovating in the broader field of experiential credentials that help us all tell the student’s story in new and better ways. Our digital credentialing journey is about partnerships, facilitated collaboration and agility. We are beginning to “speak the same language,” from the employer’s, university and student point of view at a time when all three elements of that triad need to work together to help articulate what students know and can do in ways that have meaning for all.

Mark Leuba is Vice President, Product Management for IMS Global, the leader in education technology interoperability, where Mark oversees and supports a cross-functional, integrated product plan anchored by breakthrough education technology standards such as LTI™, OneRoster™, and Caliper™. Mark also leads IMS’ leading edge work in CBE interoperability and digital credentialing. Prior to IMS, Mark held positions of executive technology leadership in higher education, commercial Ed-tech and a private consulting practice advising leading foundations and institutions. Last year Mark published Competency-Based Education: Technology Challenges and Opportunities in the Educause Review online http://tinyurl.com/EducauseTIP.

ABOUT THE AUTHOR

Currently Associate Vice Provost and Registrar at University of Maryland University College, Joellen has worked in higher education serving adult students since 1988. She focuses on the strategic future of credentialing and 21st Century student records, supporting student learning via projects that empower students with metacognitive agency to articulate what they know and can do throughout their educational journey. UMUC is one of 12 institutions working on a new comprehensive student record model as part of a Lumina Grant through AACRAO and NASPA. Her current work is with IMS Global bringing vendors and institutions together to create a new extended transcript for competency-based education.

LEARN MORE

Joellen Shendy and Mark Leuba were both speakers at the inaugural Parchment Summit on Innovating Academic Credentials in February 2016. Watch his keynote address and learn more about innovating credentials at www.parchmentsummit.com.