Stratenotes

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SIM™ micro-credentials: Putting SIM expertise on display

Coming soon in the Strategic Instruction Model™ universe: A new way for you and the teachers you work with to show your knowledge and spread awareness of SIM™. This year, we plan to launch SIM micro-credentials, a system that rewards individuals who have invested in learning and using SIM proficiently. The digital micro-credential graphics (known in some circles as "badges") can be displayed on such sites as Linked In, Twitter, Facebook, or personal websites. Each micro-credential is backed by a list of requirements that must be met before we award the micro-credential, and evidence of a recipient's accomplishments is available online by clicking on the credential.

We plan to make available a range of SIM micro-credentials to recognize different levels of expertise. **Micro-credentials do not replace SIM Professional Developers or the SIM Network.** In fact, they support and supplement the important work you do and help schools build capacity and sustainability while allowing greater recognition of the skills and expertise of SIM teachers.

We have planned several ways for you to learn more about the emergence of micro-credentials in the field of education. Richard Culatta, our keynote speaker for the 2015 International SIM Conference, is a leader in this area. In addition, the following article, a reprint of a 2013 piece by Frank Catalano, provides a good, basic understanding of micro-credentials. Look for more information in future issues of *Stratenotes*.

DIGITAL 'BADGES' EMERGE AS PART OF CREDENTIALING'S FUTURE

By Frank Catalano

For decades, the most common form of a professional or educational credential has been a paper certificate (or, for college graduates of a certain age, a "sheepskin" on parchment).

That is changing in a small, but significant, way. Due to a combination of foundation activity and technology standards, the digital "badge" is rapidly gaining traction as a new representation of a credential and has the potential to become an accepted marker of knowledge, skills or achievements—up to, and including, professional credentials.

WHAT IS A BADGE?

The concept is familiar to anyone who ever was in Scouting: learn or demonstrate a skill, earn a merit badge. But rather than requiring cloth and a needle to apply, these new badges are purely digital—and, if developed to adhere to new standards, can be shared so that the evidence behind the claim the badge represents travels with it.

Older versions of digital badges were static graphic images. Perhaps they were earned by a kid as a gold star equivalent for solving a puzzle on a website (or, more impressively to hardened nerds, for besting aliens or trolls in a massively multiplayer online game). Perhaps they were awarded by a corporate training department to employees who sat through an online course on internal procedures.

But these old-style badges lacked two characteristics that would give them real value to both the earners and the people they hoped to impress: a verifiable way for others to view how and why they'd been earned, and a method to share and display the badges outside of the closed systems that issued them. Not to mention that purely image-based digital badges have less value than a Scouting merit badge to the outside world because they're so easy to duplicate—no special cloth needed, just cut and paste.

The new breed of digital badges have critical features image-only badges lack: metadata that's embedded inside to tie the badge back to how it was earned and who issued it, and a technical standard that makes it easy for those who have earned badges to share them.

WHAT'S AN "OPEN" BADGE?

Open badges are being driven by the nonprofit Mozilla Foundation, the organization best known for the Firefox web browser and which has a stated mission of promoting "openness, innovation and participation on the Internet."

Much of the early push for open badges was as a way to formally recognize informal learning that happens outside of an educational institution, or to capture smaller "chunks" of education or skills that don't neatly fit into the current model of transcripts or degrees.

But in the process of working toward the first official, version 1.0 release of the Open Badge Infrastructure, it became clear that an open digital badge offers a mechanism for representing skills, knowledge and accomplishments that can go far beyond hobbyists or self-motivated learners.

In 2011, the MacArthur Foundation held a competition to fund promising uses of open badges. Among the winners with familiar names (NASA for robotics, Disney-Pixar for wilderness explorers, and—not surprisingly—the Girl Scouts) were others that have direct workplace application: BadgeWorks for Vets, which gives returning military personnel badges to represent military skills and training for use in applying for civilian jobs, and the National Manufacturing Badge System, which under the aegis of the National Association of Manufacturers and its nonprofit Manufacturing Institute recognizes advanced manufacturing skills obtained by both students and workers.

And under the Open Badge Infrastructure, these badge-shaped credentials—even those earned from different issuing organizations—can be combined, or stacked, and easily shared on job sites, social networks and directly with employers.

HOW CAN THIS BE USED FOR CREDENTIALING?

An open badge that is rigorous enough in how it's developed, in how the skills or knowledge are assessed, and in the criteria for awarding can represent a "micro-credential"—essentially, a more granular form of credential that is displayed as an open badge. Yet it represents a type of credential because:

- It is not earned until certain criteria are met that are established by the micro-credential sponsor or issuer: demonstrated skills, assessed knowledge or achieved experience;
- No matter how or where it is displayed by the earner, the micro-credential image carries metadata inside of it that, when clicked, securely validates for what it was issued, by whom and when it expires and might require recertification; and,
- Validation of the individual micro-credential remains under the control of the issuer (even as the earner can freely share or stack credentials), so unlike a static digital image or a paper certificate, a micro-credential can expire, be revoked or renewed.

So how might a digital micro-credential work for a credential sponsor? In several ways (none of which are mutually exclusive):

- As a precursor to a traditional credential. Certain parts of a full credential might be "chunked" to provide a scaffolded starting point for a larger credential; a separate, less intense entry-level micro-credential could be developed; or an assessment-based micro-credential, created by a credible third party, might satisfy some eligibility requirements for an established credential.
- As an add-on to a traditional credential. These micro-credentials could reflect additional specialized skills that go beyond the full credential, or reflect accomplishment of a certain number of continuing education units or ongoing professional study.
- As a standalone, new credential, reflecting an area of practice that is either emerging or not broad enough to merit a traditional credential, yet is in demand by employers or the market.

In all of these cases, the digital micro-credential has the benefit of being purely digital (no paper handling) and is based on an open standard that no one vendor controls.

HOW ARE THEY BEING USED TODAY?

Right now, there's a lot of awareness of how open, digital badges can be used for motivation (to reward volunteers and participation) and as markers of accomplishments (to award achieved learning objectives).

But current uses tend to be low-stakes—and outside of employment.

That's changing as open badges start to be used to represent workplace credentials. Employers see the need: Interviews with Fortune 500 senior hiring managers conducted by an independent research firm for Professional Examination Service (which was the first professional credentialing services organization to announce plans to design and issue Mozilla-compliant digital micro-credentials) found that companies thought digital micro-credentials would help them narrow a pool of applicants to those most likely to have the specific skills for a position. And the promise of one-click, secure verification of a claimed micro-credential—including confirmation of whether the credential was current—eased a pain point for many employers.

In addition to the ProExam Digital Micro-Credential, the Mozilla Foundation's Open Badges website identifies several other organizations planning a workforce presence. In addition to the Manufacturing Institute and Badges for Vets, Workforce.io is creating badges for entry-level workplace skills and Coderbits issues more than 500 badges for software developers and designers

WHAT ARE THE CHALLENGES?

The obvious challenge to micro-credentials represented as open badges is that they're new. Not everyone has thought through both the implications and the applications.

Perhaps less obvious, but equally important:

- Employers have to value digital micro-credentials as much as they do traditional credentials now. (Early research indicates that's likely because they are specific and are easy to verify.)
- Candidates have to be able to find digital micro-credentials that represent skills, knowledge or accomplishments that are important for them, professionally, and augment traditional credentials.
- Career and social networking websites have to make it simple for earners to display digital micro-credentials (a task Mozilla hopes to ease with its Displayer API for sites, and by not taking a proprietary approach as can happen with a technology driven by one company).

One challenge may be more semantic than technical: psychologically getting over the childhood connotation of the term "badges." That's why some organizations, such as ProExam, have begun calling the workplace versions digital micro-credentials that happen to be displayed as a badge. (Sorry, Scouting.)

WHAT ARE THE BENEFITS?

Ultimately, once the barriers are hurdled, digital micro-credentials could have tangible and unique benefits:

- Employers would be able to more quickly identify specific skills they desire in a large candidate pool and more easily verify a claimed credential.
- Candidates could incrementally earn a traditional credential, or reflect post-credentialing achievements, or create their own by combining several micro-credentials.
- Credential sponsors could assess, and issue credentials for, more granular skills or knowledge than they can today in a more cost-effective manner, replacing computer-based or paper testing sites for lower-stakes credentials with Internet-based testing and remote proctoring. And sponsors could monitor the status of issued micro-credentials by building in expiration or recertification dates.

Digital micro-credentials may appear on the surface to be totally new. But embedded in their small size may lie part of the future of credentialing, building in digital bits upon the best practices of the past.

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SIM MICRO-CREDENTIAL LEVELS

Level 1: SIM Professional Learning Credential
KUCRL awards this credential when a recipient attends a professional learning event, workshop, or session to learn about a SIM intervention, including how to teach Learning Strategies or use Content Enhancement Routines in the classroom.

Level 2: SIM Fidelity Credential
KUCRL awards this credential when a recipient has taught a SIM intervention to students with fidelity, created a portfolio demonstrating proficient implementation, created a narrative log regarding implementation, recorded a video demonstrating key behaviors for self-reflection and coaching, and (optional) interviewed a student about implementation.

Level 3: SIM Specialist Credential
KUCRL awards this credential when a recipient, under the supervision of a SIM Professional Developer, teaches another professional how to teach a strategy or how to teach with a routine; guides the teacher to fidelity; provides and describes coaching to implementation in the teacher's class; and (optional) interviews a student about implementation.

Level 4: SIM Professional Developer Credential
KUCRL awards this credential, the equivalent of the current SIM Professional Developer certificate, in either Learning Strategies or Content Enhancement. This credential is automatically granted to current SIM Professional Developers who are active members of the SIM Network (who have attended an update within the last two years and who have paid their Strateworks membership fee for 2015).

Level 5: SIM Professional Development Leader Credential
KUCRL awards this credential when a SIM Professional Developer has earned credentials in both Learning Strategies and Content Enhancement, is an active member of the SIM Network, and has met all requirements to be a SIM Professional Development Leader.

SIM & KUCRL Online Resources

www.kucrl.org

Strategic Instruction Model
http://sim.kucrl.org

Content Literacy Continuum
http://clc.kucrl.org

SIM Workshops and Updates
http://sim.kucrl.org/classes

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http://iral.kucrl.org

Kansas Coaching Project
http://instructionalcoach.org

Professional Development Research Institute
http://pdri.kucrl.org

Transition Coalition
http://transitioncoalition.org