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MICRO-CREDENTIALING: DIGITAL BADGES IN FACULTY PROFESSIONAL DEVELOPMENT

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Many instructors in higher education rely on non-credit professional development opportunities to enhance their teaching practice. Using digital badges as a form of micro-credentialing is one way that faculty and graduate students can plan, document, and share their non-credit learning and accomplishments. Micro-credentialing has the potential to allow people to set flexible and personalized learning goals, defining what professional learning opportunities are meaningful to them. This paper introduces digital badges and micro-credentialing, describes a platform for issuing and displaying badges, and introduces a pilot study on the impact of a digital badges program.

Keywords: Badges; Micro-credentialing; Professional development

INTRODUCTION

In this paper we will discuss digital badges as a form of micro-credentialing for professional learning development in higher education. We will introduce the University of Calgary's badge platform, and examine initiatives from three other institutions. This paper also outlines some of the major benefits of micro-credentialing for professional learning development, including the flexibility for individuals to plan their own personal learning pathway, making decisions about the selection and pacing of learning experiences.

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WHAT ARE DIGITAL BADGES?

Similar to cloth badges earned by Boy Scouts and Girl Scouts, digital badges are icons that represent skills and achievements such as the completion of a project, the mastery of a skill, or the accumulation of experience (Bowen & Thomas, 2014; EDUCAUSE, 2012). Digital badges embed information about when, where and how they were earned. Such information, or metadata, includes the name of the issuer, the date issued, and the criteria for earning the badge. Badges provide a visual record of achievement, and can be stored or shared through social media tools, platforms or networks such as Mozilla Backpack™ or LinkedIn™. Badges may also be added to personal portfolios to allow users to demonstrate learning in ways other than a traditional credit courses and transcripts (EDUCAUSE, 2012).

Digital badges are a form of “micro-credentialing,” which is a way to recognize competencies or skills, acquired through a variety of learning experiences, at a more granular level than is captured by conventional transcripts or degrees (Gamrat, Zimmerman, Dudek & Peck, 2014). Micro-credentialing allows people to document professional learning development attained through stand-alone (non-credit) workshops and seminars. The use of micro-credentialing enables faculty, staff, and graduate students to have more flexibility to select learning experiences and set their own personal learning pathway.

BENEFITS OF DIGITAL BADGES

Proponents of digital badges assert that they have two potential benefits: learner motivation and documenting accomplishments. First, they may motivate people to engage meaningfully with professional learning activities. Badges provide a small extrinsic form of reward for the accomplishment of learning goals. Such extrinsic rewards can have mixed influences on the

learning process for different people (Abramovich, Schunn, & Higashi, 2013), but they may be motivating to some individuals.

Second, digital badges can document informal and formal learning accomplishments achieved outside of credit programs in a more flexible way than traditional methods such as transcripts and paper certificates. According to EDUCAUSE Review (2013):

[S]maller achievements can represent incremental learning and progress toward more significant goals. They can also recognize learning and skill building that is not part of, but enhances or complements, a formal degree program. As such, badges are becoming an increasingly popular way for universities to more fully document the breadth of student learning (p. 1).

In the context of professional learning development, digital badging represents a change in approach to how accomplishments are measured. Traditionally, professional learning development is measured by the amount of time spent in training (for example, number of hours). Digital badges represent a shift from attendance-based certificates to criteria-based accomplishments. In order to receive a badge, participants must meet a learning outcome or demonstrate their learning or new skills. In contrast to attendance or participation, a digital badge indicates that the learner has met some external criteria in order to receive it (EDUCAUSE, 2012).

SCHOLARLY EVIDENCE TO SUPPORT THE USE OF BADGES

There is scant academic research on using micro-credentialing in higher education at this time. Related literature includes a recent study that examined a digital badging system for teacher professional development (Gamrat et al., 2014). These researchers determined that micro-credentialing was valuable for participants by allowing them to set flexible and personalized

learning goals, define professional development opportunities that were personally meaningful, and manage their own pace (Gamrat et al., 2014).

McDaniel, Lindgren and Friskies (2012) studied university students' responses in a credit course that allowed them to choose their own learning pathway, with exams for each module and a digital badge upon completion. Results of the study showed that students had a positive impression of the course, particularly appreciated the opportunity to define what they would like to study. The achievement system (i.e., badges) had a moderately positive impact on students.

HOW OTHER INSTITUTIONS ARE USING DIGITAL BADGES

Digital badges are in use or in development at a number of higher education institutions in the United States (Pearson, 2013). Among universities experimenting with or implementing badges are Purdue University, Pennsylvania State, the University of Southern California, Indiana University, and the University of Illinois at Chicago. Purdue University is developing a "Passport app" to enable instructors to create badges for their students, and to enable those students to share them via social media and present them to prospective employers.

While many American universities have used badges as a means to recognize the skills and knowledge developed by students, some have integrated this approach to micro-credentialing into their professional development programs. At Indiana University, the Center for Innovative Teaching and Learning (CITL) has developed a three-tier micro-credentialing system for faculty members engaged with new learning technologies (Hart, 2015). The "basic-level badge" recognizes faculty members who have consulted with the CITL and developed a basic understanding of one or more learning technologies. The "proficient-level badge" recognizes faculty members who have implemented technologies in the classroom, and shared the results of

such implementation with others, while the “advanced-level badge” recognizes faculty members who have led broader implementation of new learning technologies, or shared their expertise beyond the institution.

At Texas Wesleyan University, the Center for Excellence in Teaching and Learning (CETL) developed a complex badging system that awards points for faculty members who attend or present workshops, visit the CETL office, or engage in professional development activities through social media (Hart, 2015). CETL created an online “leaderboard” enabling faculty members and staff to compare their professional development activities. According to Hart (2015), participation in CETL workshops by Texas Wesleyan faculty members more than doubled within six months, and over four-fifths of those who participated expressed support for the badging initiative.

UNIVERSITY OF CALGARY DIGITAL BADGE INITIATIVE

The Taylor Institute for Teaching and Learning of the University of Calgary offers numerous programs and initiatives for instructors and graduate students, aimed at improving the quality of teaching and thereby enhancing the student learning experience. As of March 2015, participants who completed one of two programs received a digital badge: the Course Design Program, and the Teaching Online Program (TOP). This pilot micro-credentialing program operates on an online platform (<https://badges.ucalgary.ca/#/>) created and maintained by the University of Calgary.

The Course Design Program is a hands-on workshop in which participants design a new course or modify an existing course. In order to earn the badge, participants are required to develop measurable course outcomes for their course, and plan effective teaching and learning activities and student assessment strategies that are aligned with the course outcomes.

The Teaching Online Program is a four-week, immersive program for instructors who want to begin or enhance their online teaching. Criteria for receiving a badge include facilitating an online asynchronous discussion, planning an online activity, creating an assessment blueprint, and completing a final task of their choice.

After receiving a badge, participants can display it on their UCalgary Badges profile, and print a summary of their accomplishments or a specific badge's criteria. They can also choose to export their badges earned at University of Calgary to Mozilla's OpenBadges Backpack™, where they can be pushed to social media accounts such as LinkedIn™. By collecting and displaying badges offered by various units and institutions, people can identify their own personal learning pathway and display their accomplishments to others.

RESEARCHING THE UCALGARY BADGES INITIATIVE

Over the next year, researchers will explore the impact of micro-credentialing within the context of the professional development of university teachers. Specifically, researchers will study the impact of micro-credentialing on learner motivation in educational development programs. Participants of the mixed methods design-based research study will be asked whether or not the badge was motivating to them, how they intend to use the badge, and their impressions of the badge's credibility. The goal of the study is to determine how effective digital badges are at rewarding and recognizing educational development learning achievements and outcomes. Through the study we will gain a better understanding of the role of badges in professional learning programs by systematically observing participants' motivation, program completion, perception of the badges, and desire to take other programs that offer badges. The resulting findings will be one step towards

filling the gaps that currently exist in the literature on micro-credentialing in professional learning development.

CONCLUSION

Micro-credentialing is an emerging method of documenting professional learning development in higher education. Many instructors enhance their teaching practice through workshops, seminars, and other non-credit programs; digital badging offers a flexible, personalized way for individuals to plan, document and share their accomplishments. Unlike traditional professional activities that require only a certain number of hours of attendance, digital badges are awarded for meeting some criteria or accomplishing something (EDUCAUSE, 2012). This paper outlined the digital badging system at the University of Calgary and the criteria that need to be met in order to receive a badge. A research study will determine the effectiveness of the initiative.

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