

Resources on Badges

Abramovich, S., Schunn, C., & Higashi, R. (2013). Are badges useful in education? It depends upon the type of badge and expertise of learner. *Educational technology research & development*, 61(2), 217-232.

Educational Badges are touted as an alternative assessment that can increase learner motivation. We considered two distinct models for educational badges; merit badges and videogame achievements. To begin unpacking the relationship between badges and motivation, we conducted a study using badges within an intelligent-tutor system for teaching applied mathematics to middle-school students. Our findings indicate that badge earning could be driven by learner motivations and that systems with badges could have a positive effect on critical learner motivations. However, badge acquisition patterns were different across learners with different levels of prior knowledge. Different badge types also affected different learners motivation. Additionally, we believe that our findings are compatible with the research finding that extrinsic motivators have a negative influence on learning. The implication for educational badge designers is that they must consider the ability and motivations of learners when choosing what badges to include in their curricula.

Ady, K., Kinsella, K., & Paynter, A. (2015). Digital distinction: Badges add a new dimension to adult learning. *Journal of Staff Development*, 36(4), 24-27.

As a part of a professional learning team, educators are constantly looking for new approaches and designs that promote deeper adult learning. This article describes how educators at Cherry Creek School District in Colorado developed a digital badge system that recognizes the work teachers are doing, supports a culture and climate of celebration, and focuses learning on mastery of content in smaller steps.

Alliance for Excellent Education. (2013). *Expanding education and workforce opportunities through digital badges*. Washington, DC: Alliance for Excellent Education. Retrieved from <http://all4ed.org/wp-content/uploads/2013/09/DigitalBadges.pdf>

This report from the Alliance for Excellence Education explains how student learning outcomes can be improved through the use of digital badges.

Bowen, K. (2014). *Badges: A common currency for learning*. *Change*, 46(1), 21-25.

The article discusses the use of digital badges, or open badges, in higher education as common currency and documentation of educational outcomes. Topics include the development of the Mozilla Foundation's Mozilla Open Badges infrastructure in 2011, the mobile device application Passport, developed in 2012 by Purdue University, and the benefits of digital badges for career prospects. Commentary from Mozilla senior director of learning Erin Knight is provided.

Dededzic, V., & Jovanovic, J. (2015). Developing open badges: a comprehensive approach. *Educational Technology Research & Development*, 63(4), 603-620.

Open Badges (OBs) have evolved as novel means of recognizing and credentialing skills/competences (either hard or soft skills) acquired in various learning settings (formal or informal, online or traditional classroom). In addition, they offer new ways of motivating learners and scaffolding the learning process, while also promoting values such as openness and learners' agency, participatory learning practices and peer-learning communities. While OBs are rapidly gaining traction among educational practitioners, education-oriented companies and non-profit organizations, there have been only a few research studies aimed at deep understanding of not only OBs and their potential roles, but also of the larger educational ecosystem within which they operate and evolve. This paper aims at bridging this gap by thoroughly examining benefits, concerns and challenges related to OBs from the perspectives of different stakeholders-learners, teachers, schools, employers, and other institutions and associations. Based on these different perspectives, the paper proposes a comprehensive framework for design and development of OB ecosystems and suggests directions for future research.

Digital Badges (n.d.) *hastac*. Retrieved from <https://www.hastac.org/initiatives/digital-badges>

This page provides a number of resources including articles, webinars, and videos on digital badges.

Educause Learning Initiative. (2012, June). *Seven things you should know about badges*. Retrieved from: <http://net.educause.edu/ir/library/pdf/eli7085.pdf>

This article provides a brief overview of badges, how they work, and some advantages and disadvantages of using them.

ETS links badges to new assessments. (2014). *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/quicktakes/2014/02/05/ets-links-badges-new-assessments>

This *Inside Higher Ed* Quick Take describes how Educational Testing Service is connecting badges to two tests - the Proficiency Profile and iSkills - assessments that aim to measure what students learn in college. After completing the assessments, students can earn digital badges based on their performance.

Fields, E. (2015). Making visible new learning: Professional development with open digital badge pathways. *Partnership: The Canadian Journal of Library & Information Practice & Research*, 10(1), 1-10.

Emerging fields of study and technological developments have provided the library profession with new opportunities to shift the role of the library and librarian. This shift, while exciting for its possibilities, complicates professional development when an attempt is made to build expertise in areas without structured learning paths as found in formalized education. This article addresses possible ways the profession can give clarity and purpose to our own educational and career growth while building a collaborative and diverse learning program through open digital badges.

Foster, J. (2013). The promise of digital badges. *Techniques: Connecting Education & Careers*, 88(8), 30-34.

The article focuses on the uses of digital badges in education. It informs that digital badges can be used to supplement a conventional resume and portfolio which provide educational achievements, association memberships, community service and samples of work. It also informs that badges were introduced in the field of education when grades, diplomas and transcripts were not providing proof of skills.

Foster, J. (2014). The practicality of digital badges. *Techniques: Connecting Education & Careers*, 89(6), 40-44.

The article reports on modification of the article "The Promise of Digital Badges" which was published in November 2014 issue of the journal, related to system of digital badges, which are validated indicators of accomplishment, quality or skills earned in career and technical education (CTE). Topics discussed include badge ecosystem which has several stages including issuers and learners-CTE students and SkillBadge beta project by the National Occupational Competency Testing Institute (NOCTI).

Frederiksen, L. (2013). Digital badges. *Public Services Quarterly*, 9(4), 321-325.

This column provides a list of articles about Digital Badges, along with abstracts, to serve as a resource for further research.

Friedman, J. (2016). What employers think of badges, nanodegrees from online programs. *US News & World Report*. Retrieved from <http://www.usnews.com/education/online-education/articles/2016-01-22/what-employers-think-of-badges-nanodegrees-from-online-programs>

This article suggests that employers support the use of digital badges, but they would like to know more about them.

Gibson, D., Ostashewski, N., Flintoff, K., Grant, S., & Knight, E. (2015). Digital badges in education. *Education and Information Technologies*, 20(2), 403-410.

Digital badges provide new affordances for online educational activities and experiences. When used with points and leaderboards, a badge can become a gamification element allowing learners to compete with themselves or others, and to know how close they are to accomplishing a goal and acquiring its accompanying reputation. In this role, badges motivate continued engagement, which increases time on task and supports skill acquisition through performance. Learning outcomes signified by badges can also be displayed in an e-portfolio or on web sites and are highly transportable to social media sites. In this role they summarize achievement and signal accomplishment. With these characteristics, digital badges have the potential to become an alternative credentialing system, providing visible recognition in digital symbols that link directly via metadata to validating evidence of educational achievements in public displays. This paper traces the brief history of digital badges, defines what they are, gives examples of their use, and discusses their educational affordances.

Gonzalez, V. (2015). Digital badges: Recognizing Learning. *Leadership*, 44(3), 35-38.

The article offers information on the importance of digital badges to schools and students in the U.S. The topics discussed include how digital badges help students, effectiveness in enhancing the achievements and knowledge of students, and definition. Moreover, it also presents an overview of the Summer of Learning launched by the Los Angeles Unified School District.

Harmon, J., & Copeland, A. (2016). Students' perceptions of digital badges in a public library management course. *Education for Information*, 32(1), 87-100.

For the Spring 2015 semester of the Public Library Management course, students were given digital badges along with grades for their coursework. For each topic's corresponding assignment, students received a traditional grade and those achieving at least an A- received a digital badge that represented the skill or knowledge demonstrated. By using digital badges, the students were given the opportunity to experience this growing educational trend and reflect on their role in the learning that takes place in libraries for librarians and library users. To explore the effectiveness of digital badging, students were surveyed to ascertain how they perceived the digital badges they received. The survey results indicated that students were underwhelmed by the experience in terms of their own motivation, their perception of the usefulness of badges for employment and for professional development purposes, and their future personal use of badges.

Howard, G., & Hickey, D.T. (2016). Six steps to building high-quality open digital badges. *The Evollution: A Destiny Solutions Illumination*. Retrieved from <http://evollution.com/programming/credentials/six-steps-to-building-high-quality-open-digital-badges/>

This article suggests that a framework for highlighting how badges operate as a meaningful educational assessment tool is needed.

Hurst, E.J. (2015). Digital badges: Beyond learning incentives. *Journal of Electronic Resources in Medical Libraries*, 12(3), 182-189.

The article discusses the role of digital badges in education which was first used in the International Open Ed conference in Barcelona, Spain in 2010. It states the use of badges as learning incentives in online instructional settings from K-12 to higher levels to motivate students and enhance learning through gamification. Topics mentioned include the history of digital badge, the digital badge ecosystem and micro-credentialing or the use of badges in nontraditional education settings.

Ian O'Byrne, W., Schenke, K., Willis, J.E, III, & Hickey, D.T. (2015). Digital badges: recognizing, assessing, and motivating learners in and out of school contexts. *Journal of Adolescent & Adult Literacy*, 58(6), 451-454.

Digital badges are web-enabled tokens of accomplishment that contain specific claims and evidence about learning and achievement along with detailed evidence supporting those claims. Badges traditionally consist of an image and relevant metadata (e.g., badge name, description, criteria, issuer, evidence, date issued, standards, and tags). This column features findings from recent research examining the design principles for open digital badges that emerged across the 30 organizations awarded grants to develop badge content in the 2012 Badges for Lifelong Learning Initiative. The column focuses this inspection of the principles identified in the research (recognition, assessment, and motivation) on one student in the MOUSE outreach program. Results from this column provide guidance for educators in and out of traditional learning contexts.

Jovanovic, J. & Devedzic, V. (2015). Open badges: Novel means to motivate, scaffold and recognize learning. *Technology, Knowledge and Learning*, 20(1), 115-122.

This report is centered on the emerging concept and technology of Open Badges (OBs) that are offering novel means and practices of motivating, scaffolding, recognizing, and credentialing learning. OBs are closely associated with values such as openness and learners' agency, participatory learning and peer-learning communities. This report points to the distinctive features of OBs and how they have positioned OBs as suitable candidates for addressing some of the pressing challenges in the context of lifelong learning, including (but not limited to) (1) recognition of learning in multiple and diverse environments that go beyond traditional classrooms; (2) recognition of diverse kinds of skills and knowledge, including soft and general skills; (3) support for alternative forms of assessment; (4) the need for transparent and easily verifiable digital credentials. The report also offers an overview of the major issues and challenges that might delay or even prevent widespread adoption of this emerging technology.

Kehoe, A., & Goudzwaard, M. (2015). ePortfolios, badges, and the whole digital self: How evidence-based learning pedagogies and technologies can support integrative learning and identity development. *Theory Into Practice*, 54(4), 343-351.

Extensive research on student development and learning theory indicates that the value of a college experience can be challenging to measure because its impact is not strictly academic, but holistic (e.g., Evans, Forney, & Guido-DiBrito, 1998). ePortfolio programs have been successfully implemented at many campuses as one way for students to collect, reflect, select, and project evidence of their learning across academic and cocurricular dimensions. This article explores several other promising models for implementing emerging evidence-based, digital

technologies and pedagogies that can be used with ePortfolios to strategically inspire a holistic, digital sense of self in students.

Law, P. (2015). Digital badging at The Open University: Recognition for informal learning. *Open Learning*, 30(3), 221-234.

Awarding badges to recognise achievement is not a new development. Digital badging now offers new ways to recognise learning and motivate learners, providing evidence of skills and achievements in a variety of formal and informal settings. Badged open courses (BOCs) were piloted in various forms by the Open University (OU) in 2013 to provide a digital acknowledgement for learners' participation in three entry-level, unsupported courses: Learning to Learn and Succeed with Maths Parts 1 and 2. The desire to build on the OU's badging pilots is informed by research into the motivations and demographic profiles of learners using the free educational resources which the OU makes available through its OpenLearn platform. This research activity was repeated in 2014 and found that an increasing proportion of informal learners is keen to have their informal learning achievements recognised. This paper outlines how the evaluation of the 2013 pilots has informed the development of a suite of free employability and skills BOCs in 2014 that are assessed through the deployment of Moodle quizzes. It also discusses how the motivational aspects of digital badging support the growth in free, micro-credentialised courses against a backdrop of MOOC providers issuing certification for fee. The BOC project, which aligns with the University's Journeys from Informal to Formal Learning strategy, will help to provide accessible routes into the University for students who might not otherwise have the opportunity to participate and supports the OU Charter to promote the educational well-being of the community.

Lesser, M. (2016). Why we badge: The potential for digital credentials. *Education digest*, 81(5), 43-48.

A personal narrative is presented which explores the author's experience of interacting with Boy Scouts and Badgets on the social media sites to determine the potential of digital credentials, helping schools, and teaching students in using technology.

McIlvenny, L. (2015). Open badges – glorified award stickers or valuable learning credentials? *Access*, 29(1), 30-40.

The article discusses the concept of badges to acknowledge skills and competencies by rank and achievement. It highlights the development of digital badges which shows the levels of achievement through the increase stages of difficulty that represent motivational value. It examines the impact of information and communication technology (ICT) in the society.

Parker, H.E. (2015). *Digital badges as effective assessment tools*. Urbana, IL: National Institute for Learning Outcomes Assessment. Retrieved from http://www.learningoutcomesassessment.org/documents/Assessment_in_Practice_Digital_Badges.pdf

This brief piece, published by the National Institute for Learning Outcomes Assessment, offers an overview of the purposes and uses of badges.

Pedro, L., Santos, C., Aresta, M., & Almeida, S. (2015). Peer-supported badge attribution in a collaborative learning platform: The SAPO campus case. *Computers in Human Behavior*, *51*, 562-567.

The development of technology and namely of the Internet changed the way learners and educational institutions see and understand learning, collaboration and knowledge construction. In the educational field, game-based elements such as digital badges have been proposed and used to assess, recognize and validate knowledge construction and are considered as an effective way to improve and structure collaborative peer-based learning communities. This paper introduces the SAPO Campus badging system, a project that is being developed at the University of Aveiro (Portugal), which addresses the potential of a peer-supported badging system in the promotion of a more participatory learning community.

Randall, D., Harrison, J., West, R. (2013). Giving credit where credit is due: Designing open badges for a technology integration course. *TechTrends: Linking Research & Practice to Improving Learning*, *57*(6), 88-95.

This paper describes the design, development, and implementation of Open Badges into a secondary education preservice course on instructional technology. Open Badges provide a new way of issuing credentials to individuals who demonstrate knowledge, skill, or ability in a particular domain. Badges provide a simple system for communicating a skill along with specific information about the evidence connected with earning the badge. In this paper, we describe the course in detail along with the several iterations of design that resulted in the development of the badge system, along with the challenges faced and lessons learned for future design and use of Open Badges.

Reid, A., & Paster, D. (2013). Digital badges in the classrooms. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/advice/2013/10/11/how-use-digital-badges-help-your-classroom-teaching-essay>

Digital badge programs, which were originally developed for MOOC classes and distance learning, are becoming integrated into traditional course formats. Learners are rewarded with a digital badge upon completion of certain skills, and early research argues that badges can increase motivation and add incentive to the learning process.

Seitzinger, J. (2015). Organisational learning with open badges. *Training & Development*, 42(4), 16-17.

The article focuses on the emergence of digital badges in education and their role in organizational learning. Topics discussed include issues with open badges such as difficulty in verification, easily copied and not portable between systems, requisities of open badges such as information about the issuer, work of the learner, use of open badges in social learning approaches, recognizing mentoring relationship and providing recognition to learners.

Thigpen, K. (2014). *Digital badge systems: The promise and potential*. Washington, DC: Alliance for Excellent Education. Retrieved from <http://all4ed.org/wp-content/uploads/2014/11/DigitalBadgeSystems.pdf>

Digital badges--defined as digital credentials that convey an array of skills, interests, and achievements--are steadily growing in acceptance as a way to validate learning that takes place not only in school but also at home and in a number of other out-of-school settings. This report builds on the growing body of literature about digital badge systems by providing insight into how they are being used to enrich course curriculum in formal academic settings and enhance professional learning for educators in libraries and other out-of-school environments. It also explores the types of partnerships and policies that have played a critical role in helping these systems to flourish. Although many of the examples described in this report are in the early stages of implementation, these emerging digital badge systems illustrate the multiple ways they are supporting college and career readiness.

Waters, J. (2013). Digital badges. *T.H.E. Journal*, 40(5), 14-19.

The article discusses developments related to the use of digital badges in kinder to 12th grade (K-12) schools in the U.S. as of May 2013. Topics discussed include the nonprofit group MacArthur Foundation's showcasing of the winners of its Badges for Lifelong Learning competition at the 2013 Digital Media and Learning Conference held in Chicago, Illinois, in March 2013, the increase in adoption of digital badges in K-12 education and features of a digital

badge. Also highlighted are the BadgeStack digital badging project developed by technology firm LearningTimes and the need for digital badging proponents to create a standard for digital badges.

Young, J. (2012). 'Badges' earned online pose challenge to traditional college diplomas. *Education Digest*, 78(2), 48-52.

The article discusses certifications for completing free online higher education courses by the OpenStudy organization, adapted from "'Badges' Earned Online Pose Challenge to Traditional College Diplomas" by Jeffrey R. Young in the January 8, 2012, issue of the "Chronicle of Higher Education."

Badge Software

Mozilla Open Badges

<http://openbadges.org/>

Open Badges is a free software that institutions can use to create, issue, and verify digital badges. They are transferable to on- and offline sources and can be displayed on social media and other websites.

Credly

<https://credly.com/>

Credly is a leading digital credential service provider, helping the world recognize lifelong achievement with the most popular platforms for verifying, sharing and managing digital credentials and badges. The enterprise-class system allows organizations to officially verify skills and competencies; distribute portable and secure digital credentials and open badges; and gain actionable data and insights.

Additional Resources on Badges:

Giving Students a Leg Up With Job Skills a Resume Won't Show. Retrieved from: [Source](#)

This video from PBS's special series on "Rethinking College" explores Georgetown University's digital badges initiative that aims to differentiate its graduates from other graduates in the job market.