

Portfolium

2018 Edition

Digital Badging In Education

A Complete Guide for Educators

INCLUDING:

WHAT ARE BADGES | HISTORY | THE BENEFITS
BEST PRACTICES | HOW TO GET STARTED

WITH REAL WORLD EXAMPLES BY:



Competency X



PURDUE
UNIVERSITY

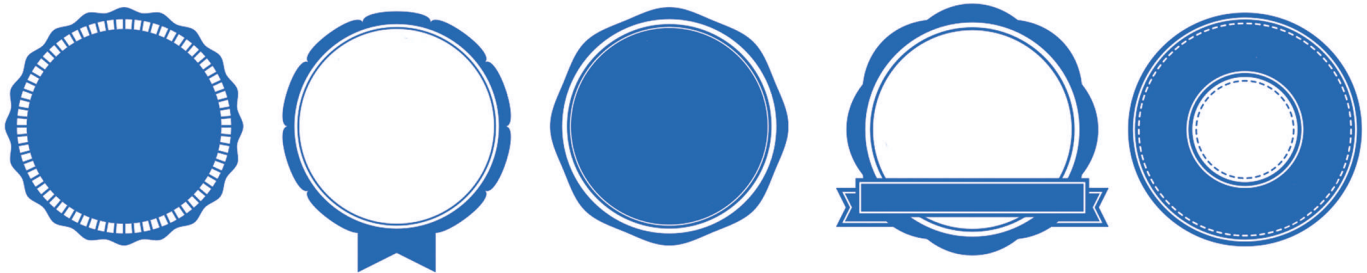


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INTRODUCTION — TO THE — INTRODUCTION

Badges are an important kind of symbol, a shortcut that we use to quickly understand more about the people we meet. Consider police officers, service members, and retail workers; their physical badges represent many hours of informal training, formal education, and official certifications. Without hiring a detective to research each of our new acquaintances, these badges give us confidence at-a-glance in their competencies and achievements.



Digital badges provide a similar shortcut to understanding the competencies and achievements of the people we're teaching, recruiting, and collaborating with online. In our dynamic society, the stakes are high for students to demonstrate relevant competencies, and for institutions to demonstrate the competency-based value of their curriculum. Badges can help.

This guide is a resource for educators interested in understanding how digital badges can be used by students as tools for advancement along learning and career pathways, and how badge circulation data can help institutions begin to analyze how classroom-conferred competencies are performing in the outside world.

DIGITAL BADGING: A WORKING DEFINITION

Digital badges are credentials awarded to individuals to publicly certify **competencies** and **achievements**.

Types of Badges

Achievement badges are issued upon the completion of one or more validated transactions. Achievement badges are issued following a machine or human-based evaluation process. For example, let's say an individual can prove that they have attended an event, completed a course, or have been awarded a prize in a competition. The individual's achievements are certified and "badged" when completion of their transactions - attendance, completion, awards - is confirmed. A badge awarded for an achievement is not a direct measure of the learning outcomes or level of effort demonstrated by said achievement, however, the character of the transactions themselves communicate their own subjective relevance and value.



Competency Badges

Represent direct, qualitative measures of competencies and are issued as a result of some performance assessment.

Achievement Badges

Issued upon the completion of one or more transactions, "scored" on Pass / Fail.

While achievement badges are transactional in nature, competency badges are qualitative in nature in that they represent direct measures of competence. As such, competency badges are typically issued as the result of a performance assessment. Competency badge issuance is triggered when some machine or human evaluator completes an assessment - often a direct, authentic assessment - of evidence or artifacts that demonstrate learning outcomes or skills. The issuance criteria found within a competency badge is directly linked to an underlying rubric chosen and sometimes (but not necessarily) authored by the badge's issuer, and used by an evaluator to score competency evidence. An issuer may determine a score threshold at which a badge is to be awarded, and can make that threshold transparent to the public. The rigor behind competency badges make them especially valuable as career currency.

EXAMPLE:

Henry attends a crash course in Javascript coding. He is awarded with an achievement badge. Henry completes a test at the end of the course and receives a 96% grade. He is then awarded a competency badge.

Competency (Scoring usually Rubric-based)		Achievement ("Scoring" often Pass/Fail)	
Badge Name	Earning Path	Badge Name	Earning Path
Photoshop Basics	1 Capstone Assignment	Participant	Attend an event
Ethical Thinker	1 Course (3 Assignments)	CPR Training Completed	Attended (P/F) 3 Sessions
Career Ready	Gen Ed Program Completion	1st Place - Business Plan	Won Business Plan Challenge

Badging's Purpose: Transparency and trust at scale

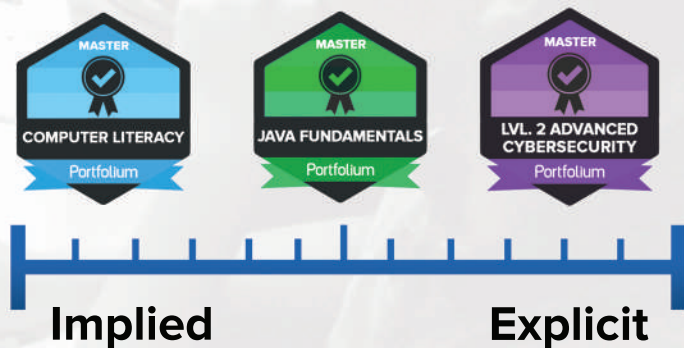
Traditional credentials such as diplomas offer an opaque view of a person's competence. Diplomas do not certify competencies at the granular level of an employer's job requirements. As such, job candidates must often supplement their applications with references and must complete pre-employment assessments. Similarly, college applicants must submit essays and standardized test scores to accompany their high school diplomas.

Certification levels

The varying levels of an individual's competency or achievement.

Many applicants, however, do not make it beyond initial screening stages which use basic variables such as the applicant's educational history (i.e., pedigree) and GPA as strong filters. These filters are important roadblocks to the student success and career advancement of all but the top-ranked graduates from the most elite institutions.

Digital badges are infinitely reusable and therefore offer a highly scalable system for assessing competencies beneath the surface in order to get a more transparent view into a candidate's abilities and potential. In other words, a badge may be issued just once – e.g., in connection with a classroom or co-curricular activity - to certify a particular skillset, but can be considered many times later by myriad employers and/or admissions officers. Badging enables a sharp departure from the traditional model of screening applicants whereas each application in a job or admissions process would burden the screening organization with a unique battery of assessments.



By increasing process scalability and reducing transactional assessment burden, organizations are afforded the opportunity to take a more evidence-based approach to screening for additional variables that predict fit and performance beneath the surface.

THE HISTORY AND EVOLUTION OF DIGITAL BADGING



Though rewards programs in businesses can be traced back to the late 19th century, it wasn't until the late nineties that the system became largely digitized. One of the earliest and most significant adopters of this trend was the local search-and-discovery service app, Foursquare. Featuring a social networking aspect that allowed users to share their locations with friends via "check-in"s, Foursquare users could gather rewards, trophies and "achievement badges" in exchange for business loyalty and consistent rate of return.¹



FOURSQUARE

Badges + Gamification for Fun

Though the significance of digital badging in the world of education and professional workforce is clear now, the commercial badging road was originally paved in the world of consumer gaming and retail. In fact, digital badges were originally designed to enhance a growing trend in consumer experience strategy known as gamification, coined by computer programmer Nick Pelling in 2003.²

In a nutshell, gamification is the concept of applying video game challenges and experience to real life processes in an attempt to increase consumer engagement with a product or business. With over 36% of the world's population using smartphones³ and the mobile applications they provide, it only made sense to turn the entire world into a massive role-playing game for consumers, with tips, tricks and prizes being rewarded as accomplishments for playing along.

Gamification

The application of game-design elements and game principles in non-game contexts, typically used for marketing purposes.

“It only made a sense to turn the entire world into a massive role-playing game for consumers.”

Badges + Gamification at Work

Though the goals for gamification in the workplace vary across companies, badging have become a popular choice among businesses looking to enhance their employee engagement. As a result, technology companies such as Badgeville began providing gamified user experience services to businesses that were looking to update their marketing tools, specifically achievement badges as incentive programs. Referred to as a "software-as-a-service" product, Badgeville has since championed the strategy for companies such as Callidus Cloud, Deloitte and Engine Yard, among many others.

Now: Badges as Credentials used to certify competencies and skills

In 2011, the world of digital badging transformed yet again when The Mozilla Foundation announced a plan to create a virtual technical standard for issuing, collecting and displaying qualifications earned online through the form of open badges.⁴

Partnering with over 300 nonprofit organizations, government agencies and others and funded by the MacArthur Foundation, The Mozilla Project sought to utilize these open badges to create "a world where your skills and competencies were captured more granularly across many different contexts, were collected and associated with your online identity and could be displayed to key stakeholders to demonstrate your capacities."⁵



mozilla
FOUNDATION

DID YOU KNOW...

The Xbox 360's Gamerscore system is considered to be the first implementation of a digital achievement system, designed by Microsoft in 2005.

The importance of evidence-based assessment at the root of badging has become a key initiative promoted by many prominent educators. As outlined by Linda Siefert, Director of Assessment at the University of North Carolina Wilmington, in the 2011 Peer Review article, "Assessing General Education Learning Outcomes"⁶:

"In the twentieth century, assessment relied on tests of explicit knowledge, or what we call content knowledge in education. Since content is now available quickly and inexpensively through electronic sources, simply knowing the correct answer no longer defines expertise...To use the language of information and technology researchers, our focus is changing from assessing codified knowledge to assessing tacit knowledge. This requires more complex assessments that rely on authentic demonstrations and detailed and well-vetted rubrics."

Open badging within the institution of higher education isn't without its criticism, however. Some vocal opponents perceive the system as yet another digital threat to the college diploma, encouraging earners to seek a badge-based "certification platform" instead.

On the contrary, though, badging is utilized best when supplementing the college curriculum rather than supplanting it. As illustrated in Pearson VUE's Open Badges for Higher Education ebook, "The threat of disruption is real" only because "the pace of change in higher education is clearly accelerating, forcing institutions to adapt and evolve more rapidly...For higher education institutions interested in keeping pace, establishing a digital ecosystem around badges to recognize college learning, skill development and achievement is less a threat and more of an opportunity."

THE MECHANICS OF BADGING



Badge Issuance

As for **issuance**, badges must go through an issuer for distribution, known as a **badge issuer**, who acts as an official allocator of badges to individuals as validated by your university faculty. This could include Portfolium, Credly, Badgr, etc. Badge issuers may simply issue a badge, or go as far as to insert a badge into a recipient's ePortfolio (See "How do badges circulate..." below).

Badge Earning Pathways

A single badge doesn't tell the whole student learning story. When combined with a pathway, a student can earn badges as they move along any type of curriculum. Instead of one piece of paper awarded at graduation, a student can showcase how they got to that point and the competencies gained along the way. Digital badges simply make it easy to translate those competencies into a public facing skill that is viewable and searchable by employers.

Badge Authoring

More than just defining badge levels, though, **badge authoring** encompasses all visual, syntactic and semantic construction of the badge.

In terms of design, badges may be created using local (desktop or mobile) or web-based graphic design programs. These can include Adobe Illustrator, Adobe Photoshop and Vectr, to name a few. There are also online services that offer "point-and-click" badge creation along with access to badge design libraries, including Portfolium, OpenBadges.me and Canva.

Portfolium

Credly



badgr

Public Badge Detail Page

Digital badges lose their value if they don't have details attached that communicate to the viewer how it was earned, the skills/competencies it represents, the validity of the issuer, the rubric used to award the badge, and if it is still valid or expired.

WHAT'S IN IT FOR U?

Institutions without a digital badging initiative will be left behind and their students will suffer as a result because their classmates at competing schools will have digital credentials they can take with them and use to display their competencies and achievements.

A badging program may look different at each institution which depends on your objectives. No matter what your role is, you should be planning how to adopt the new technology in order to benefit both students and faculty.

Student Success

Badging provides a scalable way to engage students by inspiring them to achieve and offering positive reinforcement when they've done so. What's more, the badging process yields compounding returns: As students accrue badges, they become more invested in the learning and earning process.

As evidenced by a Chicago City of Learning initiative to begin the world's first citywide digital badging program in 2014, over 100,000 badges were earned by Chicago students in the span of one season. This system, in turn, created real world results, with "a record-breaking 22,000 youth" starting their first "jobs at thousands of worksites throughout the city," as reported by the Chicago Department of Family and Support Services.⁷

Pathways

A way of tracking a person's learning journey, or badge earning path. Earning paths vary in their duration and complexity based on the number of milestones and requirements built into each path. Types of requirements for earning a single badge, for example, range from attending an event to getting an 80% on a course assignment to completing a community service project. One badge may require completion of several requirements.

Earning paths are often constructed by program leaders at learning institutions. Other times, earning paths are constructed by industry, often in collaboration with academia. Competency X is a collaboration between K-12 leaders and a consortium of biotechnology companies, for example.

Funding to support the planning and automation of badging earning pathways has come from myriad sources in recent years. For example, the Digital Media & Learning Competition has awarded over \$13 million to seed more than 100 projects in order to inspire novel uses of badging and other emerging technologies.⁸

Earning Path

The tracking of a person's long-term milestones, which can vary from basic to complex as pre-determined by the badge issuer.

Stacking

Placing discontinuous increments of learning together to form a larger / macro credential.

Assessment

Badges can extend the value of accreditation-driven student learning outcome assessment by making assessment results portable for students interested in sharing proof of their competencies with the world. This is a benefit to students, and to institutions who might use badge circulation data to close the loop on the relevancy of competencies conferred upon students through the curriculum.

Here's an example of how badging and assessment can work together:

Institutional, program, or course learning outcomes are defined and later measured using rubrics. A program administrator can use software that connects to an institutions existing assessment process, automatically issuing badges to students (or faculty) when an ePortfolio artifact is assessed and scored above a certain point threshold.

Let's look at a specific example related to a nursing program:

Badges issued in connection with course-level assessment would certify unique knowledge and skills attained in a nursing course. Badges issued across courses could point to program-level outcomes, useful for both the institution and the student.

As explained by Heidi E. Parker of Purdue University, "Badges provide the opportunity to assess skills that we do not normally assess in more traditional forms of content-based assessment like summative exams and reports." Parker continues, "In addition, there is an increasing number of institutions that are revising their core curriculum to incorporate learning outcomes such as creative and critical thinking, global citizenship, leadership, teamwork, and ethical reasoning (to name a few)."⁹

The image shows a screenshot of a Portfolium profile for Luis Lopez. The profile includes a header with the name and a quote, navigation tabs for PROFILE, PORTFOLIO, and CONNECTIONS, and an Overview section with statistics (15 Entries, 66 Skills, 3 Connections). The main content area displays a grid of badges, with the 'HIPAA Trained' badge highlighted. The badge features a blue folder icon with 'HIPAA' written on it. Below the icon, the text reads: 'Participated in study of HIPAA regulations and actions which result in violations. Demonstrated: An understanding of HIPAA regulations as it pertains to healthcare professionals, The ability to identify and avoid HIPAA violations, An understanding of how to act when a HIPAA violation has occurred.' The badge is awarded by LACCD-My Credentials.

Example of a badge on Portfolium, <https://portfolium.com/articblaze17>

Normalization of Assessment Criteria

The best strategy for **normalizing** digital badges in such a way that the relative value and meaning of a given badge can be understood alongside another is to leverage standards-aligned badge issuance criteria, instantiated in badge assessment rubrics. For example, by leveraging the standard rubrics of institutions such as the Association of American Colleges & Universities or the National Association of Colleges & Employers, assessment measurement criteria becomes standardized on a massive scale, and thus normalized for all participating institutions.

There are several benefits of normalized assessment criteria used across multiple institutions:

- **Credit transfer:** Students can easily transfer credits between institutions when they have evidence of the competency required to obtain the credit and the corresponding digital badge.
- **Learning success and pathway analysis:** Educators can share data between their institutions using the same rubrics and assess larger datasets in order to make decisions that improve a student's learning success.
- **Employers reviewing candidates:** Hiring managers will be able to understand what each badge means, the competency required to earn the badge, and quickly see the artifact or pathway attached to the badge. Currently, badges are mostly ad-hoc and not meant for helping learners share their competencies with employers.

Normalization

The common standardization found in assessment measurement criteria when leveraging the rubrics of all participating institutions on a massive scale.

Career Readiness

Though badges obviously benefit the student as an active learner, it is also important to keep in mind the efficacy of badging as a learning tool for career readiness and eventual recruitment within the growing standard of competency-based hiring. "Digital badges also enable genuine job applicants to benefit from instant credibility and avoid losing out on career opportunities to unqualified fraudsters," says Brandye Barrington, Sr. Program Manager at Oracle.¹⁰



Institutional Branding

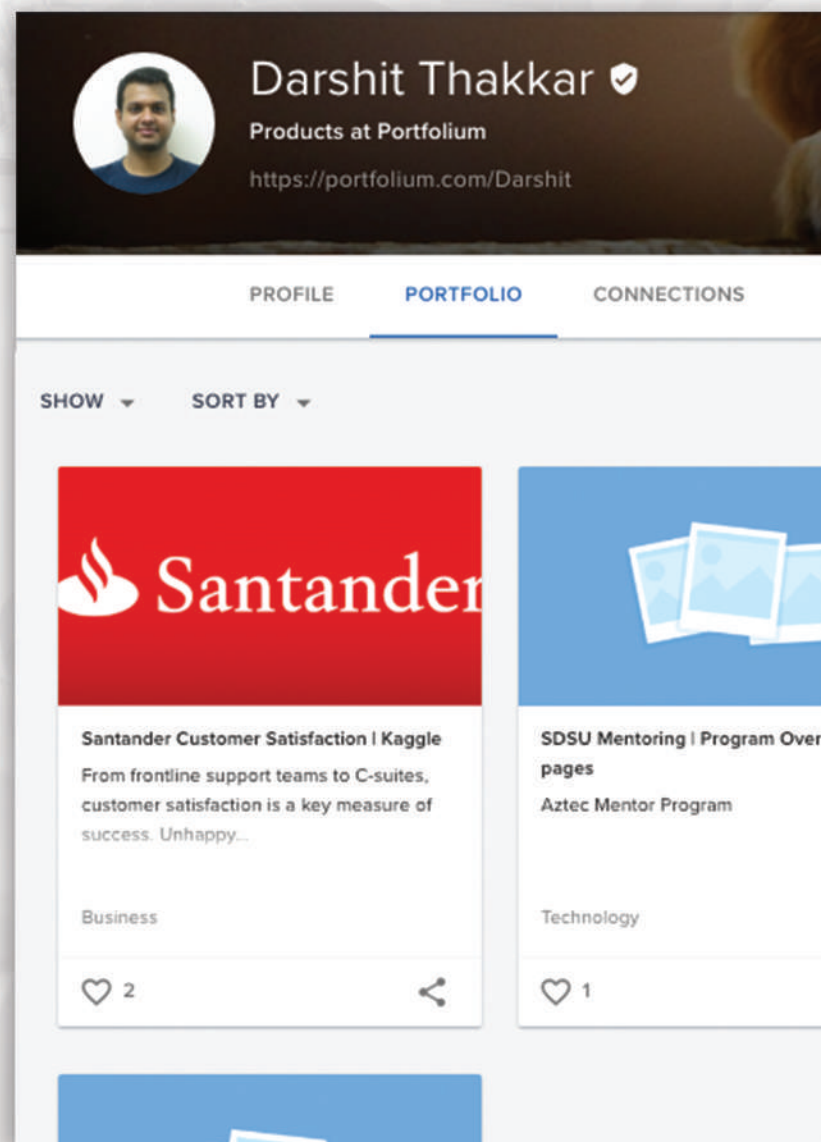
In a study published by The Quarterly Review of Economics and Finance that traced the adoption of innovations in higher education, it took an average rate of 26 years for innovations to become a median standard among institutions, with computing innovations being adopted twice as fast as curricular innovations. Compare those two decades and a half of standardization with the rapid growth of badging in the six years since its educational implementation.¹¹ Not only does campus-wide digital badging mark an institution as a part of a forward-thinking movement, but it also helps to signal to the market that your students are skilled and accomplished.

HOW DO BADGES CIRCULATE IN THE LARGER ACADEMIC AND PROFESSIONAL ECOSYSTEM?

With the emergence of cloud-based technology, sharing items throughout various networks has become unprecedentedly easy.

As a result, a primary agent in housing and sharing badges, along with the evidence and artifacts linked to them, is the fast growing technology of the ePortfolio. **ePortfolios** are repositories for evidence (work samples, artifacts, projects) and certifications that link to an individual's competencies and achievements.

The growing usage of badges in ePortfolios have proven to play an effective role within the competency marketplace, specifically in its ability to promote discoverability for competency and desired skill-sets among the marketplace actors. With the digital tool, competencies are made discoverable via badges when badge meta-data is indexed by systems such as Portfolium's TalentMatch platform for recruitment. Competencies are also discoverable when competency badges are embedded in other sources, such as resumes and social media profiles.



Example of ePortfolio, <https://portfolium.com/Darshit>

EXAMPLES OF DIGITAL BADGING INITIATIVES IN EDUCATION

Competency X on the benefits of digital badging:

Southern California's Del Lago Academy is one example of an institution leading the way in promoting a strong digital badging initiative, primarily through their Competency X program. Utilizing a rubric of skills and qualifications as articulated by the Next Generations Science Standards, Competency X is a science-specific initiative created to track evidence of competencies through digital badges for students, all which are validated through industry and college partners.

With grants from the Assessment for Learning Project, as supported by the William and Flora Hewlett Foundation and Bill & Melinda Gates Foundation, Competency X serves to provide students with the skills required to be a scientist for their internships and college applications, providing opportunities and academic and career readiness.

On the benefits of digital badging within the Del Lago Academy Competency X learning assessment system, the program stated that the digital tools allowed “prospective employers to assess the credibility of the micro-credential,” adding that “our industry partners loved the idea of being able to watch a quick video that shows the learner demonstrating a concrete skill.”



Along with improved accessibility in credentialing, Competency X also stated that badging allowed “learners to reflect on what led to success with current and past practices. If a learner wants to re-learn a particular skill set, all they have to do is click on their badge to view the tips and strategies that helped them previously reach success.”

The portability and ability to keep and display the badges as lifelong credentials was also a key benefit for students in the program. According to the school, it created “opportunities for learners to be engaged in a larger community of practice.” This larger community of practice promoted the collection of “artifacts of skills, knowledge, and dispositions to be used across multiple digital badges,” which helped “illuminate the interconnections between digital badges and prevent the compartmentalization of skills and knowledge.”¹²



The University System of Maryland on adopting digital badging:

The University System of Maryland (USM) is another case study of an institutional system pioneering the use of digital badging in higher education. As part of a broad academic platform, USM's William E. Kirwan Center for Academic Innovation is leading the Badging Essential Skills for Transfer (B.E.S.T.) initiative, a system-wide, scalable approach to career preparation that improves education-to-employment pathways by maximizing the value of college students' curricular and co-curricular experiences and more clearly communicating graduates' career-ready skills to employers.



UNIVERSITY SYSTEM *of* MARYLAND

Through B.E.S.T., the Kirwan Center is addressing three significant challenges that impede students' successful preparation for a career and subsequent transition into the workplace: Employer concerns that college graduates lack career-ready skills needed for workplace success; Disconnects across the curricular, co-curricular, and work experiences of our students; Career centers with limited ability to engage students one-on-one in the career development process. B.E.S.T.'s eight badges are focused on career readiness competencies certified by the National Association of Colleges and Employers (NACE):



Citing an AAC&U commissioned poll, 80% of employers said it would be “fairly”-to-“very useful” for employers to be able to access an electronic portfolio of student's work that summarizes and demonstrates students' attainment of key skills and knowledge areas.¹³

"B.E.S.T. is a scalable approach to career preparation that connects curricular and co-curricular opportunities already available to students, aligns them more intentionally to career-ready skills, and more clearly communicates graduates' achievements in these skill areas to employers through digital badging," explains MJ Bishop, Director of the University System of Maryland William E. Kirwan Center for Academic Innovation.

As of fall 2018, the B.E.S.T initiative will be building badge earning pathways at eight of USM's institutions.

Lewis & Clark College supports assessment with badging:

At Lewis & Clark College, institutional assessment and digital badging stakeholders are innovating together to meet the needs of accreditors, students, and employers, simultaneously. The initiative was sparked by graduating students that worked for the IT department asking for a way to show off their skills gained through the work study program and a large employer partner who needed to ensure graduates had the skills needed for the entry level roles at the company.

Adam Buchwald, the CIO of Lewis & Clark College, is leading the initiative on campus. Adam says “Badging really is the new form of assessment that benefits both the students and institution. We needed a way to track student competencies inside and out of the classroom then connect them with employers needing those exact skills.”¹⁴

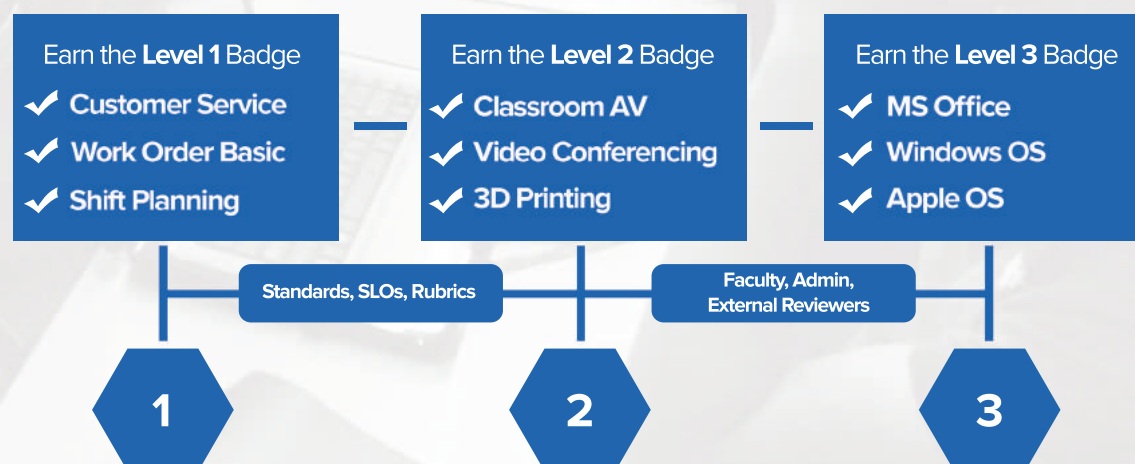
Instead of started a program that lived only within the IT work study program, they took a look at the bigger picture and student success lifecycle ending in actual career opportunities and needs of employers.

Digital badges made sense as a way for them to do just that, but they needed the tools to do it and a process that could scale throughout the institution.



BADGING INITIATIVE PROCESS:

1. Reverse engineer industry needs for general, specialized, and leadership roles
2. Map competencies/learning outcome requirements for specific roles
3. Design curriculum, or “badge-earning pathway”, for Information Security Minor
4. Create rubric and design a digital badge for each learning outcome in the curriculum
5. Import rubrics, badges, and pathway into technology platform (in this case, Portfolium)
6. Enroll students in program
7. Assess evidence/artifacts and award badges as students achieve different learning outcomes and levels within the program
8. Display digital badges, backed by evidence, rubrics, and tied to skills/competencies, an a student ePortfolio they can share with employers



BEST PRACTICES: WHAT WORKS & WHAT DOESN'T

Transparency is king

Your badge is as valuable as the rigor and substance behind its issuance. Be very clear in defining your issuance criteria so that those inspecting badges can see that it was no trivial feat to earn the badge.

Competencies are queen

When in doubt, use badges to certify some type and level of competency that a student has demonstrated. This more than anything will provide value to a learner reflecting on her skills and trying to cash them in for jobs and internships.

Free badges from the Learning Management System (LMS)

Ensure that badges are not trapped in an LMS. They do no one any good there. Students need to be able to take their badges with them for life.

Don't be redundant

If you are giving a badge to a student for earning an A, you aren't adding new or additional value. The student's transcript already proves that she earned an A. Instead, issue the badge for the competency or skill achieved on the assignment they earned the A for.

Embrace badge diversity in co-curricular activities

Badges can be used to certify competencies and achievements demonstrated in and out of the class. Get creative about weaving badging into student clubs, student success programs, internships, and other co-curricular activities.

Automate issuance

We have seen instructors set up crude web forms to collect evidence for evaluation. These forms then flood teachers with email attachments that pile up in their inboxes, rather than organizing artifacts in a database for proper archival and a more streamlined review. These manual "hacks" are not only inconvenient, they completely break down in certain cases such as when badge evidence needs to be evaluated by multiple reviewers or reported on in aggregate.

Turn on "Direct-Deposit"

Ensure that badges are sent directly to portable, lifelong ePortfolios that do not cost the student money to maintain or access. Don't make it difficult for students to retrieve or claim badges and then make them wonder where to put them.

Give students a playbook

Give students a playbook for beefing up their eportfolios and generating resumes from those portfolios with badges pre-embedded. Teach them how to extract value out of the badges they earned.

WHAT EDUCATORS SHOULD DO TO GET STARTED

Now that you have the basics down, we can start getting into the nitty gritty: actually implementing badges with your educators and institution.

For a great example of implementation, we can look at the University System of Maryland's (USM) B.E.S.T Initiative¹⁵, the latest in a system-wide plan for creating more effective and efficient learning environments through digital credentialing.

Establish a set-list of common goals for your badges.

As noted by the USM initiative, the very first step to take is to work together with your institution to design and develop an outline for the goals you want your digital badges to accomplish. Your badging system needs purpose and laying down common goals works to identify them. For the USM institutions, which include over ten campuses, the universal goals to focus on were Collaboration, Communication, Critical Thinking, Globalism, Interculturalism, Leadership, Problem Solving and Professionalism.

Educate your local marketplace actors.

The last (and current) step for the USM Digital Badging Initiative is, of course, actual integration, the step that you will have to take as well to set all your work into motion. As noted by the USM initiative, while the institutions may explore philanthropic interest in supporting the integration with grants, the USM institution must also continue to pilot the constellation of career-ready badges as a proof of concept and work more closely with regional and national employers to help them understand the badges and their role in the recruitment process.

Organize and design a timeline-based process.

Laying out deadlines for anything is always hard, but taking a cue from USM's initiative may help. To organize a clear calendar for activation, USM utilized what is known as the Analyze, Design, Develop, Implement and Evaluate (ADDIE) instructional design model. With the model, the institutions were able to inform their processes, show work completed and to be completed, and then list the actions taken during each phase to produce the outcomes in the subsequent step. Included in these steps were the conduction of necessary research, determining badging criteria, choosing a badging platform provider and many others.

Credly's Best Practices¹⁶

1. Building A Team of Credential Champions

Bringing together a core group of individuals both inside and outside the institution to focus on creating a new credential ecosystem that harmonizes work internally as well as with employers.

2. Identifying Priority Industries or Employers

Identifying an actionable set of targets—a particular industry or a set of employers - and solve the specific workforce challenges by developing a responsive set of digital credentials.

3. Creating an Onboarding Program:

Presenting the new credentials to stakeholders and define the value of those credentials—an approach which directly impacts the adoption of the new credentials.

4. Issuing Credentials

Documenting workforce-relevant achievements with transparency and evidence in a portable, learner-centered medium.

5. Conducting After-Action Reviews

Analyzing what happened, why it happened, and how digital credential initiatives and associated processes can be improved to enable scalability within the institution.

BADGING EXPLORATION CHECKLIST

1. Determine the broad goal(s) for your badging program.

- Issuing sub-diploma certifications for students' competencies and/or achievement
- Helping students and graduates prove their skills to employers
- Showing accreditors a direct and practical link between SLOs and employer needs

2. Decide which type(s) of competencies and/or achievements are going to be certified with badges.

- NACE or other employment-related competencies
- Competencies tied to program completion / co-curriculars / institutional outcomes

3. Decide which type(s) of learning artifacts will be assessed.

- Course assignments, projects, or other tangible work samples
- Awards, certificates, or other evidence of achievement

4. Select a lifelong ePortfolio platform for housing these artifacts.

- Ensure that the ePortfolio platform can house student resumes, projects and badges - all of which are searchable by employers

5. Decide whom will be acting as evaluators/reviewers, directly assessing student learning artifacts.

6. Select an easy-to-use assessment tool with a built in rubric library to make evaluation scalable.

- Ensure that the tool integrates with your ePortfolio and LMS

7. Select a badge-issuance tool that automatically awards badges based on assessment results and deposits them into ePortfolios.

8. Prepare badges for issuance into your issuance tool.

9. Launch your program to one or more strategically chosen student cohorts that map to your badging program goals.

THE SUMMARY



Ensure that your badge issuing process is a transparent, quality process that takes valuable measurements of achievement and competencies and certifies them. Ensure that your process is automated, otherwise it won't scale. Ensure that your badges aren't floating around in outer space and that they are properly housed and published in a way that people can find them. Ensure that students are given a playbook so that they get the most value out of their badges.

If implemented correctly, digital badges can help solve the skills gap by demonstrating student/learner competencies and achievements to employers in a searchable way backed by a variety of evidence such as the rubric criteria required to earn the badge.

DIGITAL BADGING GLOSSARY

Achievement Badge - Achievement badges are issued upon completion of one or more transactions.

Assessment - The act of assessing student learning or program/institutional effectiveness in order to adjust and improve the curriculum or meet accreditation requirements.

Badge - Badges are digital credentials that certify competencies and achievements.

Badge Authoring - Badge authoring encompasses all visual, syntactic, and semantic construction.

Badge Detail Page - A summary page showing the evidence, criteria, evaluator, issuer, and competencies associated with the badge.

Badge Learning Pathways - See “Pathways”

Badge Transparency - A badge must have a publicly viewable detail page transparently displaying how, why, when, and by whom a badge was issued.

Certification - Badges publicly certify an individual’s competencies or achievements.

Criteria Source - This tells an employer who authored the criteria and influences level of trust in criteria.

Competency Badge - Badges issued based on a qualitative assessment of competencies demonstrated.

Competency Marketplace - A global web of transactions made by and between the suppliers (learners, workers, etc.) and consumers (employers) of competencies.

Credential - A certification of a competency or achievement typically displayed as a certificate.

Earners - The recipient of a badge.

Earning Path - Badges are issued in accordance with completion of basic or more complex earning paths which are pre-determined by the badge issuer.

ePortfolio - ePortfolios are repositories for evidence (work samples, artifacts, projects) and certifications linked to an individual’s competencies and achievements.

Evaluator - The person or machine that validates whether or not badge issuance criteria has been met.

Evidence - Evidence of work/learning, also known as artifacts, shows an employer which specific artifacts were assessed related to the badge and competencies associated with it.

Gamification - The concept of applying video game like challenges and experience to real life processes in an attempt to increase consumer engagement with a product or business.

Issuance - The act of issuing a badge to a recipient.

Issuance Criteria - Similar to a rubric, the criteria is used to determine if a badge should be awarded and also to display how/on what basis the learner was assessed.

Issuer - A badge issuer is an official allocator of badges to individuals. Badge issuers may simply issue a badge, or go as far as to insert a badge into a recipient’s ePortfolio.

Normalization - Badging data is normalized by the matching mechanisms of the competency marketplace in order to have a common language used across educational institutions and employers.

Open Badge - Digital badges that use the Open Badge Standard, an open source initiative created by Mozilla and now managed by the IMS Global Learning Consortium in order to have a standardized way to issue, earn, and display badges.

Pathway - A linear, contiguous series of competencies and achievement milestones connected to make up a learning pathway. It is a way of progressively tracking a person’s learning and milestones across multiple curricular and co-curricular activities within a program.

Trigger - The action item taken that automatically triggers a badge to be issued.

Validation - The process by which an evaluator weighs evidence against issuance criteria.

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