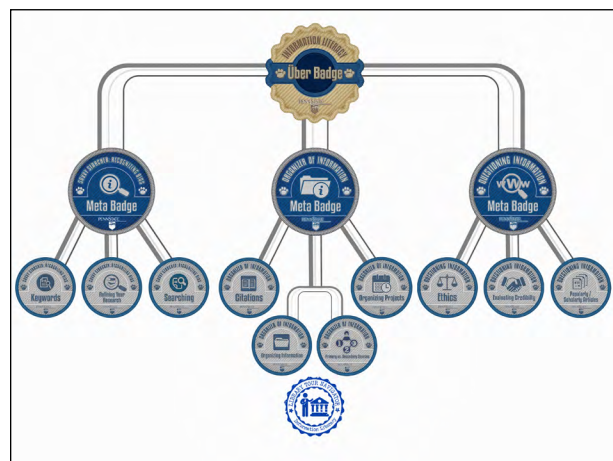


# Overview, Definitions, and Benefits

Emily Rimland and Victoria Raish

Digital badges or micro-credentials are virtual representations of a skill or knowledge, typically a granular one. They can often be “stacked” or combined to paint a picture of a learner’s unique skills or add up to a larger certificate (see figure 2.1). Digital badges specifically include a visual representation—a virtual token or icon that is clickable. By clicking on the badge, you can see various metadata about what the learner did to earn the badge (see figure 2.2). Badges are often earned on badging platforms that allow users to also collect and showcase their badges, and the badges are often verified in different ways by a person or institution. Because badges are stackable or combinable into a “learning constellation,” badge designers often build them in a hierarchy or pathway to make earning them flexible and customizable. In the same way curricula use traditional credentials, most curricula can be “badged.” The tricky part is making the learning meaningful and impactful; however, meaning and impact can be incorporated when design and deployment are considered up front. Badges can also be offered for all levels, from beginning to advanced, and all disciplines and areas of study, from medicine to project management to information technology to manufacturing.

The oft-used comparison to Girl Scout or Boy Scout badges as the analog equivalent of digital badges is accurate, albeit hackneyed, but it doesn’t tell the entire story. Another way to think about digital badges is using the paper receipt analogy. When you buy something in a store, you walk away with a piece of paper showing what you bought. This official document proves that you paid for an item and that it is yours should you need to return it, get a rebate, or make another transaction. However, store receipts often use a cryptic language of abbreviations



**Figure 2.1**

The hierarchy of Penn State’s Information Literacy digital badges. The badges shown at the bottom are to be earned first and are grouped by category of skill. If a learner earns all the badges in a category, they can earn a meta badge. If the three meta badges are earned, they can earn the uber badge.

for each item and communicate only the bare essentials. Similarly, the college transcript is the check-out receipt of the academic world. The transcript is the “receipt” students often need as “proof of purchase” when applying for graduate school or other opportunities. It lists courses, credits, and grades; however, the typical transcript doesn’t provide any depth or nuance about what a student learned in each course. The transcript may not even explain the abbreviations for the courses listed, leaving one to guess what they mean, not to mention what was learned. Transcripts also do not typically recognize learning that happens outside

## Step 2: Comparing to an Expert List

In this step, you'll be comparing and contrasting your credibility criteria with an expert list to learn to look for a variety of aspects when evaluating a web site.

### Instructions

You probably surprised yourself with how much you actually look at when you are visiting websites. Take the time to compare your list to that composed by an expert and note where you have similarities or differences from the expert list (only pay attention to the 'what to look for in web sites' list.) The expert list can be accessed here: <https://libraries.psu.edu/services/research-help/evaluating-information-rubric>

Did you look for the 5 points emphasized in the Penn State guide to evaluating information? When examining the points in more detail, did you come up with any similar questions or thoughts to those in the list? For example under validity did you also see if sources of information are cited? Write a short paragraph (4-5 sentences) comparing and contrasting your list to the expert list. Do you see any important points that you did not include in your evaluation list? Is there anything in your evaluation list that the list from Penn State did not include? Do you think you will use any of these evaluation questions when looking at websites in the future?

If you prefer, you can create a product using a web 2.0 technology that is the equivalent of a 4-5 sentence paragraph. (about a 30 second video). Please provide a url to your product in the textbox. If you are not sure what is meant by the term web 2.0 technology please refer to the following resource: [Web 2.0 Tools](#). Good grammar and sentence structure is expected.

### Evidence

Status: Approved by Emily Rimland on 05/16/2018 at 2:56pm

[View Evidence History](#)

test

**Figure 2.2**

An example of the metadata for a step completed to earn a badge. This image shows the instructions, the evidence submitted to earn approval for the step (in this case a test response was used for demonstration purposes), and when and who approved the work.

the traditional routes of seat time, such as through service-learning projects, study abroad, or on-the-job training. Often, evidence of that type of learning is left behind in the environments where it was earned.

This is where micro-credentials are changing academic currency—by disrupting the transcript as one of only a few vouchers of one's education and allowing learners to port their credentials back and forth between schools and jobs. By recognizing the granular learning that goes into one's learning journey, micro-credentials are a currency that allows one to demonstrate and communicate one's value, and they're backed by an issuing agency, such as a school or company. Instead of there being only one denomination of academic currency, such as the bachelor's degree, micro-credentials allow recognition for learning that doesn't replace a degree but positively augments it.

Going digital with credentials allows for many benefits, and below we'll outline some of them. For some of the drawbacks, see chapter 4.

One of benefits is data richness. The digital nature of badges allows the capturing of various details that encourage and support assessment, validity, security, and analysis. In a time when data insight platforms and learning analytics are changing higher education by providing a wealth of data that can be used to help students succeed, badges too have their place. The steps taken to earn a badge, along with a student's evidence for each step, provide a way to assess learning because the evaluator is seeing the evidence and judging whether or not it passes muster. Additionally, on most badging platforms, detailed information about learners' progress either on a personal level or in the aggregate can be easily found. Detailed information, such as the number of steps completed, badges earned,

and dates earned, can be conveyed by reports easily generated by badging platforms. In terms of validity and security, most badging platforms can be tied to a type of authentication to verify the identity of the learner by having learners log in via an institution's authentication system. Many institutions use official brands or marks on the badge icon itself as a way of indicating the issuer's validity. Third-party services can be employed to research and verify the validity

of a badge. No doubt blockchain technology, which is rising in use, will be used in the future to completely authenticate the veracity of a badge and the earner's identity.

Micro-credentials also offer social benefits. One way they do so is through increasing equity and access to education. Micro-credentials allow a learner to recognize parts of a degree such as specific courses or skills; thus, learners can display proof of learning and skills even if they don't have a full degree yet. For example, if you earn three-quarters of a degree and have to delay completing your degree due to a family emergency, you still incur three-quarters of the debt for the degree but don't have much proof to show for it. If you have micro-credentials, you at least have something to show for your learning other than debt. Additionally, when you are able to resume your studies, you have a clearer picture of what you did and where you need to go to resume your learning. Micro-credentials also support the belief that learners should own their academic records. Because of the nature of micro-credentials, learners have more autonomy to port their records back and forth to different institutions or jobs.

Clearly, micro-credentials have many potential benefits; a few are listed above, and many more will be outlined in following chapters. However, in order for micro-credentials to reach a tipping point for adoption, many groups need to play a role and coordinate the different aspects of badging, both technologically and systemically, for badges to gain ground. Libraries can be a major player in this orchestration moving forward, and in the following chapters, we'll share strategies for how you can get involved.