

Elevating Real-World Learning

Two Cities' Efforts to Credential Real World Skills through Digital Badges



n a Thursday afternoon in April, Elena's eyes scan a computer screen at the Providence Public Library.

As a student in the library's Rhode Coders program, she's using HTML and JavaScript to build a video game modeled on PacMan. This afternoon the game isn't working correctly so she's sifting through her code to find the source of her error. She's so determined to fix her game that she can hardly hear the buzz around her as her peers pack up for the day.

Nearing the end of her junior year, Elena is preparing to apply to college where she plans to study computer science. For years, Elena thought that college wasn't for her. She found school boring and disconnected from her life. Her experience in Rhode Coders changed her perspective. In an environment where she was invited to own her learning experience, Elena has excelled.

Though Rhode Coders offers computer programming instruction, developing students' technical coding skills is not the program's primary goal. Instead staff seek to equip students with the real-world skills, such as perseverance and teamwork, that they need to succeed in college and the workplace. To elevate the importance of these skills, Rhode Coders joined a network of after school programs in Providence and Boston issuing credentials for skills including teamwork, engagement, perseverance, communication, and critical thinking through digital skills badges. Programs recognize that these skills are critical to students' postgraduate success but are often undervalued by colleges and employers making acceptance and hiring decisions. Digital badges, which serve as portable documentation of students' skill attainment, provide a means to measure students' skill development and credit them for their learning.

The badging initiative made a difference for Elena. Along with her peers, she helped Rhode Coders define what it means to demonstrate perseverance. Using this definition, she meets with her instructor regularly to set goals and discuss her progress. This process helped Elena recognize the areas where she perseveres both within and outside

her program. She recognizes perseverance in her ability to remain focused on her college goals despite her fears about paying for higher education and her uncertainty about being the first in her family to go to college. She now has the language to articulate this strength in job interviews and college applications. When asked to provide evidence of her skills, Elena can refer to her digital badge.

For the past two years, the Rennie Center followed teams in Providence and Boston as they engaged in a bold experiment to credential the skills that young people, like Elena, gain outside of school. Though strengthening real-world skills has been a longstanding goal of many after-school programs, creating a competency-based credentialing system was a complex task. The following report shares successes and lessons learned from this work, which was led by Boston After School & Beyond (Boston Beyond) and the Providence After School Alliance (PASA). These lessons learned are designed to provide guidance for student-serving organizations exploring opportunities to formally recognize students' nonacademic skills.

The Leaders: Innovators in Out of School Time Learning

About Boston After School & Beyond and the Providence After School Alliance

In their respective cities, Boston Beyond and PASA are intermediaries that coordinate networks of after-school and summer learning opportunities, expanding access to high-quality programming for urban youth. They have long recognized that learning does not end at the conclusion of the school day or year. Through music, arts, athletics, and leadership programs, youth explore the future that they want to create for themselves. They gain valuable skills, such as the ability to think critically or work in a team, that support them in reaching their goals.

PASA and Boston Beyond recognize that when privileged students complete job and college applications, they often showcase their non-academic skills via volunteer experience, unpaid internships, or music lessons. This further disadvantages marginalized students who have not traditionally had access to this type of experiential learning. Leaders at Boston Beyond and PASA are determined to change this. By strengthening the quality of out-of-school learning and using digital badges to showcase a holistic view of students' skills, Boston Beyond and PASA seek to unlock opportunity for youth.



- 1. Student enrolls in an out-of-school-time program.
- 2. Instructor introduces competencies associated with the program. Students partner with instructors to define each skill. Examples: Perseverance, Critical Thinking, Teamwork
- 3. Instructor introduces program activities and the measurement process, which encourages students to develop an improvement mindset.
- Instructors and students measure skill attainment and growth throughout the program and document scores in an online badging platform.
- If students meet the criteria, the platform automatically triggers the award of a digital badge.
- Students upload additional evidence of skill attainment to be stored in the badge.
- 7. Students log into the badging system to access the badge, which they can post on LinkedIn, social media, or other sites.

What is a Digital Skill Badge?

A digital badge is a visual representation of a skill that a student possesses. Badges can be posted on resumes, job applications, college applications, and networking sites including Facebook and LinkedIn. They are grounded in verifiable evidence, showing what the badge recipient did to earn the credential. By clicking on the badge icon, individuals can learn about the student's work and the organization that awarded the badge.

The criteria for students to earn a badge are unique to each city. A brief description of the Boston and Providence processes are included below.

Providence Digital Badges

In Providence, students earn badges based on a rubric which defines the sub-elements of each skill and the specific ways in which students practice the skill within their program. Each youth sets individual growth goals to focus their learning within each skill. Youth and instructors monitor progress regularly. In order to earn a badge, students must demonstrate exemplary performance in each sub-element of the skill and provide evidence of their learning.











Boston Digital Badges

In Boston, students earn badges based on a research-validated skills assessment, 80% attendance, and a portfolio that demonstrates the work they completed to attain the skill. At the beginning of the program, students define their chosen skill(s) and set goals to improve their abilities. As the program progresses, instructors facilitate self-reflection, peer feedback, and teacher evaluation sessions for students to assess their skill development. At the end of the program, students demonstrate their skill gains and engage in a final reflection on their experience via their portfolio.









The Online Platform

Leaders in Providence and Boston agree that their work would not have been possible without an online tool that connects programs, allows instructors to measure skill growth, and administers badges. Both cities use ForAllSystems, a tool with a student-facing component that allows youth to store, manage, and share their badges. The tool also includes an administrative view to facilitate system-wide coordination between the intermediary and the program instructors.



4 Elevating Real-World Learning



What We've Learned

In building a digital badging system, Boston and Providence team leads faced two competing priorities. Consistency across programs was important to gaining recognition of digital badges amongst colleges, school districts, and employers. At the same time, programs needed flexibility to allow youth to own their skill-building process. Over the course of two years, PASA and Boston Beyond created a competency-based system that awarded students for attaining a skill rather than for completing a certain number of program hours. This system was designed to provide a consistent structure that could be implemented flexibly across diverse programs. Lessons learned from this effort are highlighted in this section.

>>> Students Need to Own their Skills (and their Badges)

For Mia, a student at Providence's Young Voices, perseverance was something that adults always told her she needed to do. When she became bored in math class or didn't want to finish a book, her teachers told her to persevere. It wasn't until Mia joined Young Voices that she defined perseverance for herself.

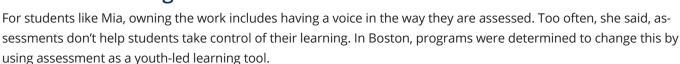
As a girl of color in Providence schools, Mia saw firsthand the disparities in discipline between herself and her white peers. She saw other students of color sent home from school for lingering in the hallways or wearing clothing the school deemed inappropriate, while white students were not punished for the same behavior. In Young Voices, she learned to use her voice to address problems in her school community. She joined a group of students advocating for change by speaking up to the Providence City Council and School Board. Perseverance took on new meaning for her. "I learned that being outspoken is not an annoyance. It's a necessity," Mia said. "Any issue that's been fixed is through people speaking out and advocating."

Mia is proud of the digital badge she earned for perseverance. It reminds her of the work she did on behalf of herself and her peers in Providence. Her experience illustrates the importance of youth ownership in the badging process. Too often in school, students are told where and when they must develop a skill. In Providence, leaders recognized that their role is to create opportunities for students to develop skills and give students the language to articulate these skills. "There's a point where adults need to get out of the way," one instructor said. "The young people can tell us what matters to them and what they want to learn."

KEY TAKEAWAY

Digital badging must focus on skills that matter to students. Programs should provide opportunities for students to demonstrate these skills in personally meaningful ways.

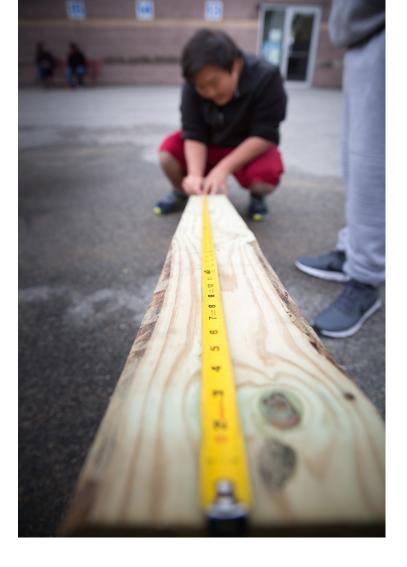




In the first year of the pilot, Boston Beyond worked with individual programs to create their own rubrics to measure skill attainment. Though this provided the opportunity for programs to authentically measure competencies, they quickly learned that this approach would not scale. Programs did not have the internal capacity to create a measurement system for each skill, and standards for skill attainment varied across programs.

In year two, Boston Beyond shifted their practice based on feedback from program instructors. Instead of using program-specific rubrics to measure skill attainment, they created a three-part measurement process. In order to earn a badge under the new system, students need to earn a score of four out of five on a validated, research-based skills assessment called the Survey of Academic and Youth Outcomes (SAYO). They also need to attend the program at least 80% of the time and create a portfolio demonstrating evidence of skill attainment.

When digital badging initially launched, only adults had access to SAYO data. To create student ownership in the assessment process, instructors began to share SAYO data with students and used this data to have honest conversations about student progress. Many students used these conversations to advocate for the support they needed from instructors to reach their goals. The portfolio created an additional opportunity to shift the role of the instructor, as it gave students the opportunity to choose how they would demonstrate their learning. Instructors became facilitators of this process, offering guidance while allowing students to lead.





Instructors acknowledged that student ownership of the assessment process remains varied. While many instructors are eager to provide opportunities for student ownership, some have struggled to cede power to students. Leaders remain hopeful that instructors struggling with this mindset shift will learn from their peers who have seen success under the new model.

KEY TAKEAWAY

Provide opportunities for student ownership in the assessment process. Foster an environment in which adults welcome youth feedback and adapt programming accordingly.

Make Learning Transparent

At the beginning of the pilot, the assessment process for digital badges was so different from assessments in school that some students and instructors were skeptical. They wondered whether colleges and businesses who are accustomed to letter grades and test scores would ever accept a new credential. Given that the badging pilot focused on lifelong skills, they recognized a need to define what proficiency looked like in each skill area. They knew that badges would only gain currency if those viewing students' resumes clearly understood what the badge represents.

Despite general agreement on skill definitions, instructors in Providence recognize that skills look different across programs. For Elena in Rhode Coders, effective communication included her ability to explain the error that she identified in her code. For Mia in Young Voices, effective communication included her ability to create a specific message to share with city councilors and school board members. The PASA team recognized this necessity by including program-specific criteria in the rubric.

An example of program-specific criteria from Youth in Action (YIA), a youth leadership and advocacy organization, is included below. The organization provides youth with opportunities to facilitate workshops for peers and adults.

These youth-led workshops frequently involve difficult conversations on topics including community health and student-centered learning. In creating their communication criteria, YIA staff and students reflected on the skills that youth need to facilitate engaging, action-oriented workshops.

Providence students see the transparency of their rubric as an important step towards digital badge currency. When a student earns an A on a traditional academic transcript, those reviewing the transcript have no information about the student's work. When Mia shares her digital badge from Young Voices with potential employers, it provides evidence that she can effectively communicate with diverse audiences, facilitate difficult conversations, and read others' verbal and nonverbal communication.



UNIVERSAL CRITERIA

Oral: The student communicates points clearly, is articulate, recognizes audience and adjusts as needed; uses appropriate tone of voice; uses appropriate timing and pace of speaking

Written: Student writing is well organized and sequential; expresses complete thoughts

Non-Verbal: Student body posture and gestures indicate engagement. Student uses eye contact; respects physical space; indicates awareness of facial expressions.

YOUTH IN ACTION CRITERIA

- Student makes their own conclusions about power structures and the play between identity and society and is able to clearly communicate and articulate that conclusion
- Student understands the difference between presentation and facilitation
- •Student is able to read a room effectively
- •Student is able to guide a conversation to desired results
- Student designs, authors, and catalogues workshops
- Student creates welcoming spaces for others to engage in
- Student challenges those around them respectfully
- Student is able to convey information to various groups and people based on age, background, and craft

Though the measurement process differs, transparent learning is a priority among Boston programs as well. In addition to sharing portfolios within the digital badge, programs equip students with the language to speak to their skills and their learning. Using digital badges as evidence, students are learning to share their accomplishments during interviews, on their resumes, and in application essays. Though youth still envision a future when a digital badge will be weighted similarly to a test score or course grade, they recognize that significant work remains. By sharing their experiences in conversations with colleges and employers, youth hope to awaken adults to the importance of their out-of-school learning.

KEY TAKEAWAY

Badges should contain program-specific information about the work that students completed to earn the badge. Given that digital badges are not yet widely recognized, youth need the language to advocate for their accomplishments.

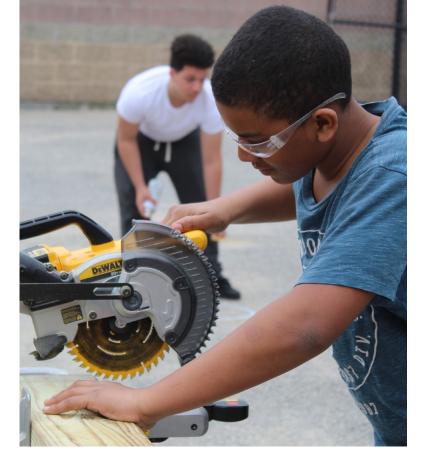


>> Evidence of Success

After a two-year pilot, programs in Providence and Boston found that badging led to program-, instructor-, and student-level improvements. Within both cities, programs strengthened their ability to spread effective practices. Instructors became more intentional about the skill development opportunities they provide to students. Students learned to articulate how their skills will support their future endeavors. The examples below highlight strengths noted by students, instructors and program leads participating in the pilot.

Program-Level: Citywide Connections

For program leads and instructors, digital badging provided a new opportunity to work with other youth development organizations. In the second year of the pilot, PASA and Bos-



ton Beyond launched instructor professional development with an emphasis on peer-to-peer learning. They sought feedback from instructors about the type of training they needed to feel comfortable with digital badging. Instructors spoke of a desire to deepen their own understandings of each skill and to better engage youth in the measurement process.

At the beginning of the 2019-2020 school year, Boston instructors met to share successes and solve common problems. Those who struggled to integrate youth ownership learned strategies from other programs. In Providence, instructors who demonstrated promising practices in the 2018-2019 school year were invited to share with the larger group through a yearlong community of practice. Instructors were energized by the opportunity to learn from their colleagues. PASA and Boston Beyond leads have begun to see effective practice spreading across programs.

Instructor-Level: Positive Relationships

Instructors found that the work led to unexpected improvements in their relationships with students. For Jeremiah, an instructor at a Providence program, monitoring progress at the skill level changed the way he looks at his students. He gave the example of Anthony, a bright teenager who is easily distracted by other students. Rather than focusing on Anthony's challenges, the badging process gave Jeremiah an opportunity to reflect on Anthony's strengths. Jeremiah noticed Anthony's ability to share his perspective and communicate effectively with peers and adults. Jeremiah's relationship with Anthony has improved and made him a more effective instructor.

Student-Level: Mindset Shifts

At Harlem Lacrosse in Boston, students reported that monitoring goals led to an improvement mindset. Imani, a 6th grader, worked with her coach to set a teamwork goal. She discusses her progress with her coach regularly. "I always thought teamwork was something you were good at or you weren't, but Coach Maddie said she saw me improving," Imani said. For students like Imani, growth mindset transfers beyond teamwork to other areas of their lives. Imani is trying to improve her grades, especially in language arts where she has struggled in the past. "Coach Maddie is tutoring me...I think I'll be able to get into a great high school," Imani said.



Conclusion: The Way Forward

PASA and Boston Beyond began their digital badging efforts at a time when youth-serving organizations across the nation sought opportunities to recognize the real-world skills that students need for success in college, the workplace, and in life. In the intervening years, additional research has demonstrated the critical nature of these skills, though they remain undervalued in formal college and job application processes. Badging work in Providence and Boston offers a promising model for youth-serving organizations that seek to recognize and promote students' real-world skills.

As their work progresses, networks in both cities plan to provide youth with opportunities to shape the future of digital badging. In strengthening existing badging processes and developing currency for digital badges, programs recognize that youth have valuable information to share. To meaningfully integrate youth voice, organizations are learning from programs like the Boston Student Advisory Council (BSAC). The badging initiative at BSAC, a student leadership organization, has been youth-driven from the outset. BSAC students recently designed a digital badging curriculum focused on communication and perseverance, skills that are critical for youth advocates seeking to spark change in the community. For Jayden, a BSAC senior, the case for digital badging is clear. When someone looks at his resume, he doesn't care if they know what grade he received in 10th grade English. He wants them to know that he's a changemaker who isn't afraid of a challenging conversation. "I want the badge to give you a sense that I'm doing something for a greater cause," he said.



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About the Rennie Center

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^{*}Names have been changed throughout this report to protect student confidentiality.



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