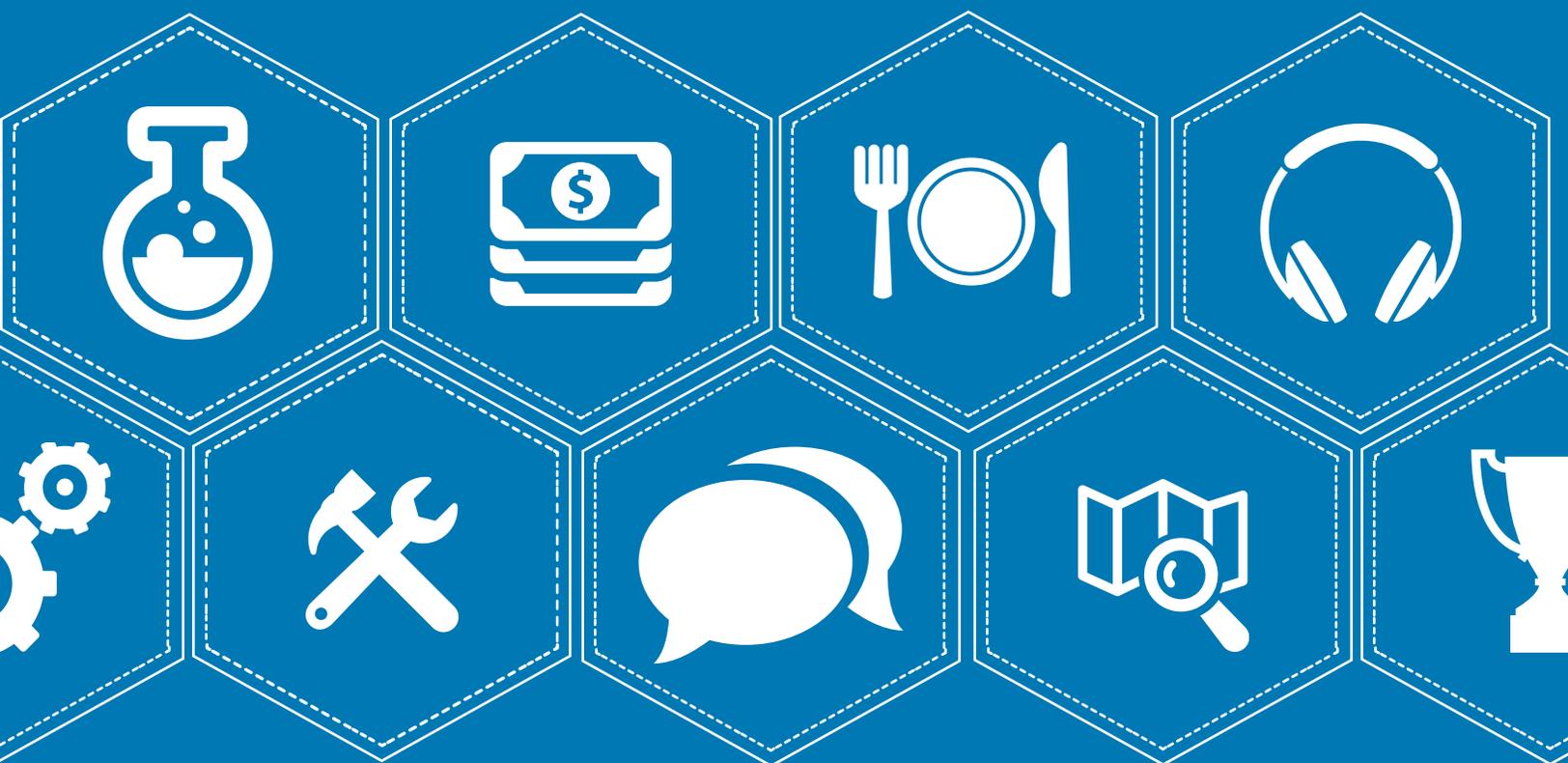


DIGITAL BADGES IN AFTERSCHOOL:

CONNECTING LEARNING IN A
CONNECTED WORLD

July 2015



INTRODUCTION

Over the course of the past few decades, the demand for highly-skilled workers has steadily increased both in the United States and across the globe. For the youth of today to thrive in the 21st century economy, they must have opportunities to develop, practice and demonstrate a wide array of skills and abilities. However, the traditional instructional models employed in many schools too frequently rely upon antiquated teaching practices based on rote memorization of content. In response to this shortcoming, many schools, afterschool programs and other education partners have begun experimenting with innovative strategies with the hope that they will prove to be both more effective and more efficient than traditional instructional models in teaching children the skills they need to succeed.

One of the most promising new models that is gaining traction across the country is competency-based learning. This model transitions away from the current seat-time models in favor of an adaptable, flexible structure that provides youth with the opportunity to gain formal recognition for demonstrating mastery of academic content. Also known as proficiency-based learning or personalized learning, this new model ensures that specific skills such as critical thinking, problem solving and teamwork are addressed in addition to core content.

While the rise of competency-based learning is certainly promising, measuring these skills and showing how students meet specific competencies has remained a challenge. Simply put, traditional grading scales are not designed to measure the types of 21st century skill development and competency-based learning that occurs both in schools and in out-of-school settings. The business and higher education communities are interested in seeing competencies students have developed prior to accepting students or offering employment, yet students often have no formal way of showing their relevant skills, knowledge and achievements.

A Solution Emerges: Digital Badges

Systems for developing and issuing micro-credentials commonly known as digital badges have been created in response to this challenge. The introduction of digital badges within the education system provides opportunities to validate student competencies and for students to carry digital resumes that illustrate to colleges and potential employers the types of skills that they have developed and the content they have mastered through their learning experiences.

Competency-based learning in general, and the digital badging movement in particular, provide unique opportunities to providers of afterschool and summer learning programs. While these types of programs have typically bypassed traditional and standardized assessments in favor of providing opportunities for students to demonstrate mastery of acquired skills, the digital badges movement provides innovative and cost-effective mechanisms to document and validate the learning that occurs in these programs and to support and recognize the quality of programs and youth development professionals.

The afterschool environment provides a tremendous opportunity to expand the use of digital badges for competency-based learning, and afterschool and summer learning programs were among the earliest adopters and innovators in the application of digital badges. Each day throughout the United States, students are engaging in hands-on, experiential learning through afterschool programs that focus on the sciences, arts, humanities, and other areas of interest to students. These programs are helping students develop 21st century skills through opportunities for teamwork, critical thinking and problem solving.

These skills are invaluable to many industries, and when students receive digital badges they are able to demonstrate to employers that they have skills the employer is interested in.

Digital Badging for Youth Development Professionals

While great strides have been made in building professional development and quality coaching systems, the afterschool field in general still has limited access to credentialing and certificate programs that recognize the accomplishments, training hours and competencies of youth development professionals. Various local and state systems have adopted research-based quality improvement processes that can be relatively easily mapped into digital badge systems. Digital badges are a valuable way to incentivize and track participation in training and professional development. For youth development professionals, badges offer a way to display skills and competencies acquired through training and allow their professional development to be universally recognized.

The Role of Statewide Afterschool Networks in Digital Badges

In the past two decades, the afterschool and summer learning field has become increasingly sophisticated with the support of city-county-and state-level intermediaries building systems that help grow program quality and sustainability. In all fifty states, statewide partnerships and networks are helping to foster collaboration and policies to develop, support and sustain high-quality afterschool and summer learning programs for children and youth.

Statewide afterschool networks have a unique role to play in convening industry partners to validate badges for youth. The networks can also provide professional development to afterschool programs to help them design badge frameworks around the types of learning that students need to be successful. Finally, the networks are able to utilize their collective reach to build additional badging opportunities for students to the benefit of both the afterschool programs and the youth in those programs.

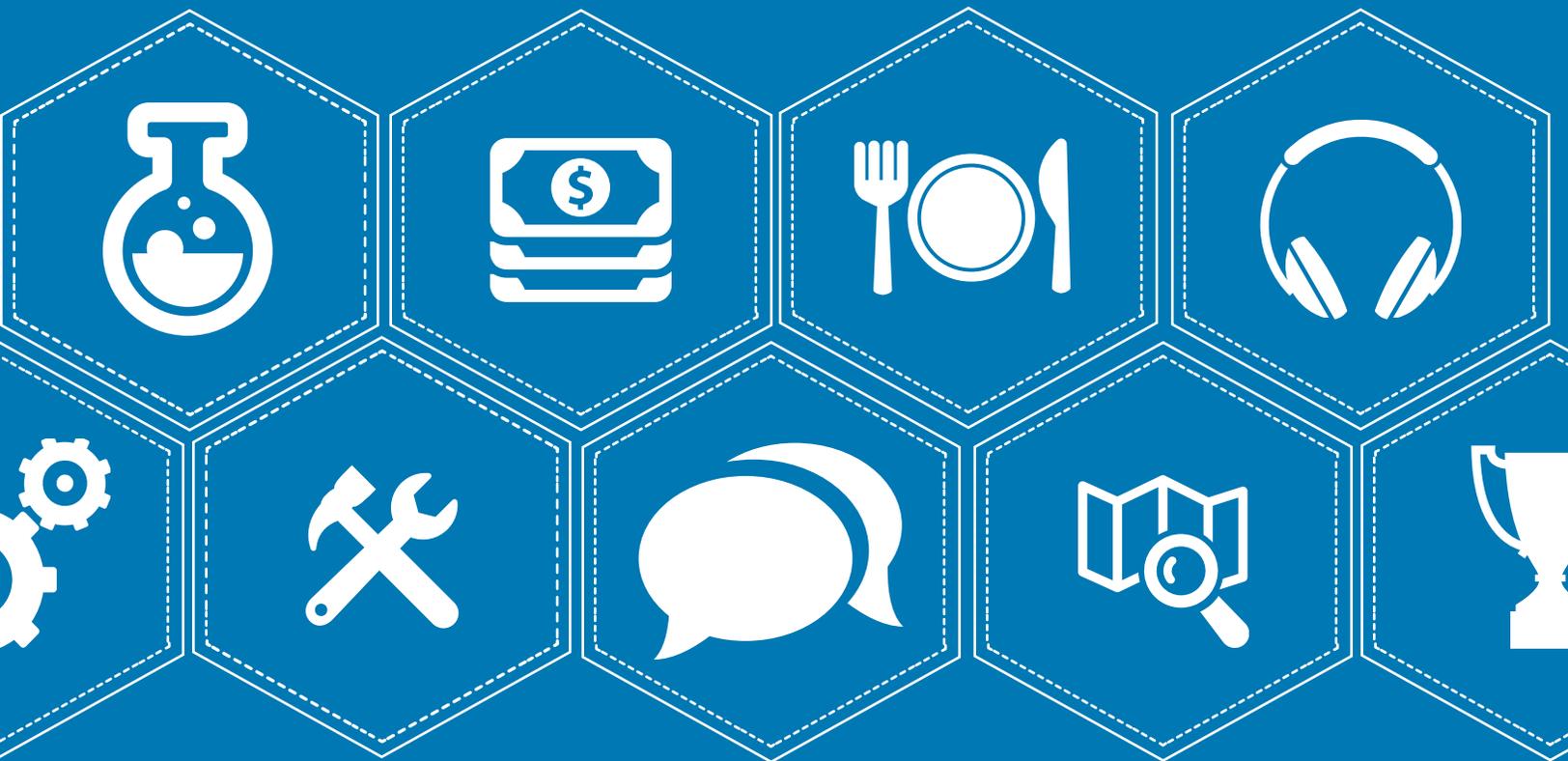
Statewide afterschool networks are also well-situated to raise awareness around digital badges among afterschool providers. A survey of more than 500 afterschool providers by the Afterschool Alliance in fall 2014 found that almost two thirds of providers were not at all familiar with digital badges, yet three quarters of providers were interested in learning more about digital badges. Almost three quarters of respondents said they would be somewhat or very likely to create digital badges for their programs “if provided with appropriate support, such as funding and technical expertise.”

Digital Badge Pilot Projects

With all of these factors in mind, in 2014 the MacArthur Foundation supported five digital badging pilot projects run through the Afterschool Alliance and the statewide afterschool networks. The pilots, which took place in Maryland, Michigan, Ohio, Oregon, and Rhode Island, ultimately issued badges in settings as diverse as youth development professional training sessions, summer learning programs, higher education settings and afterschool programs. In this report we provide a close-up view of how these pilot programs introduced digital badges to help recipients display the skills and knowledge they developed in the programs, along with recommendations from program and network staff and the lessons they learned throughout the process.

DIGITAL BADGES IN AFTERSCHOOL:

CASE STUDIES





CASE STUDY: MARYLAND

In 2014, the Maryland Out of School Time Network (MOST) began working with Wide Angle Youth Media (WAYM) to implement a pilot focused on developing high quality digital badges for both technical and workforce skills in Baltimore. Wide Angle Youth Media was already a recognized leader in Baltimore for supporting youth leadership, and had taken on a number of innovative and complicated projects in the past. WAYM was also already measuring skills with defined criteria, and was known for teaching specific technical skills and providing opportunities to apply those skills through project-based learning.

At the outset of the project, WAYM and MOST recruited an Advisory Board that helped both guide the badge pilot and identify and communicate best practices for others in the out-of-school-time field. The advisory committee included representation from Baltimore City Public Schools (BCPS), the University of Maryland and the Maryland State Department of Education, as well as from community partners and education technology companies. The Advisory Board identified the need for a meaningful platform through which the students could share the badges they earned, and it was ultimately determined that students would create LinkedIn profiles through which they could display their badges.

To communicate the value of badges to key stakeholders, MOST held a “Brown Bag Luncheon” with representatives from the Mayor’s office, local businesses, higher education, K-12 education agencies and youth-serving organizations. At this luncheon, MOST and WAYM presented the badges the Wide Angle students had created and earned, sharing their experiences with the design process and implementation. The chair of the Baltimore City Public School Board invited MOST and WAYM to the next board meeting, where students explained how digital badges could both complement traditional grades and serve as an alternative to traditional grades for recognizing achievements or skills acquired. The board was very interested in the idea and asked how they could spread the word of digital badges.

QUICK FACTS:

Number of Pilots: 1

Badge Issuing Organization: Wide Angle Youth Media

Badge Platform(s) Used: Achievery; Credly

Number of Badges Issued: 4 (so far)

Badge Recipients: Afterschool Program Participants

WAYM worked with staff from Baltimore City Public Schools to identify three skills for which they could develop badges. They placed priority on technical and workforce-oriented skills that were already being measured through WAYM's Verified Resume process, using a rubric that Wide Angle had already developed and tested. They emphasized skills that they knew the students would gain during the semester to streamline the badge issuance process: public speaking, idea visualization and digital storytelling. The Wide Angle staff worked with BCPS to develop badge levels, criteria, and evidence aligned to National Media Arts Standards and the Common Core State Standards.

In February 2015, representatives from the Wide Angle Attendance & Design Team met with members of the Advisory Board to learn more about digital badges. This meeting was a pivotal moment, with the students realizing that people from the school system, the business community, and higher education were interested in badges. Students began to believe that earning badges through Wide Angle programs could truly add value to their work. The more students learned about the badges, the more engaged and excited they became. The students were interested in handling the badges' visual design, and researched other programs' badges, focusing on symbolism, color, and how a badge might have more or less detail.

At the outset of the pilot, MOST and WAYM had selected Achievery as a badge issuing platform, and Achievery staff helped guide the badge and framework design process. However, Achievery announced that they would suspend their support of badges before any could be issued. MOST and Wide Angle chose to use Credly as an alternative platform, in part because it offered integration with LinkedIn.



Wide Angle experienced a number of other technical and practical challenges with the issuance of the badges as well. Students had to create both LinkedIn accounts and Credly pages, and linking the two proved not to be a particularly intuitive process. Students also needed to keep track of their usernames and passwords for both, which sometimes proved difficult. Some students

were more motivated than others to sync their LinkedIn and Credly pages, and some of the students who received the in-depth LinkedIn training did not ultimately earn badges.

In order to determine which students earned intermediate or advanced public speaking badges, Wide Angle had students rate and provide constructive criticism for each other's presentations. Using the badge criteria also helped to focus the students' feedback. Students also began considering what skills to badge next, with photography being a popular and in-demand programming element. Wide Angle staff are also contemplating providing badges for more technical skills proficiency in vector drawing.

CASE STUDY: MICHIGAN



The Michigan After-School Partnership (MASP) Open Badges Project was the product of a partnership between MASP, the Michigan Department of Education (MDE), the Michigan AfterSchool Association (MAA), Michigan State University Extension (MSUE) 4-H, and Eastern Michigan University's 21st Century Community Learning Center (21st CCLC) Bright Futures Program. The Project ultimately included three separate pilot projects: a summer learning program, a 21st CCLC afterschool program and a professional development program for youth development workers. The summer and afterschool pilots were developed in collaboration with MDE and connected their badges to existing STEM competencies and "essential skills."

MASP and MDE staff deliberately decided to align the student-focused program activities and badges with the Michigan Career and College Ready Standards. Students' initial interest levels varied from pilot to pilot. Most of the middle and high school students enrolled in the MSU Renewable Energy Camp were very open to the experience, but the middle school students from the Bright Futures Program were more difficult to motivate. Staff overcame this obstacle by recruiting students to test the badges, incorporating their feedback, and trying the new approach with the group.

The badges for youth workers contributed to a STEM Endorsement associated with the Michigan School Age Youth Development (MiSAYD) credential, and were aligned with the Click2Science Essential Skills. The youth workers were excited and eager to learn about badges. Both traditional scouting badge and gaming references were found to be valuable in explaining the concept and process, and the opportunity to showcase the value of student experiences gained from participation in the programs was viewed as extremely valuable. The youth workers were excited to earn

QUICK FACTS:

Number of Pilots: 3

Badge Issuing

Organization(s): Michigan State University Extension (MSUE) 4-H ; Eastern Michigan University's 21st CCLC Bright Futures Program; Michigan After-School Partnership

Badge Platform(s) Used:

Michigan State University Badging System; GameStart

Number of Badges Issued:

167 (127 to Youth and 40 to Youth Development Professionals)

Badge Recipients:

Afterschool Program Participants; Summer Program Participants; Youth Development Professionals

badges, which led to requests for more opportunities to earn badges and for the youth workers to learn about how to issue badges. The afterschool staff who participated in the workshops were eager to learn how to make Open Digital Badges a part of their own programs.

The MSU Renewable Energy Camp created badges quickly with the Michigan State University badging system, but the other pilots took a while to develop because of the potentially daunting technological aspect of the project. The Bright Futures pilot leveraged the partnership with one of its afterschool service providers, a tech startup named GameStart, to handle the technical aspects of the pilot, deliberately including flexibility in the design process. The professional development badges were also developed with GameStart's system, which was straightforward and user-friendly, linking the badges to the Mozilla digital backpacks. Once the system was developed by GameStart, the project became much more user-friendly and afterschool and summer providers were able to develop meaningful badges for the students to earn.



Solar Energy Badge

Michigan State University Extension 4-H's Renewable Energy Camp's "Solar Energy" badge signifies that the recipient has conducted experiments, researched new ideas, and explored innovative opportunities in the field of renewable energy while participating in the solar energy program.

MASP held workshops and presentations around the state to introduce the concept of digital badges to afterschool and summer providers, school leaders, business leaders and other stakeholders. Their messaging focused on ensuring that stakeholders had a solid understanding of the knowledge and experiences that the badges signified rather than on the badges themselves.

It became apparent that professional development would need to be provided for staff to become familiar and comfortable with the technology and the process for the development and issuance of badges. However, as discussions took place about the criteria, assessment, and evidence for the pilot badges, it became clear that additional training and tools would also be needed to help staff learn to identify and capture the competencies that students would be learning through the activities.

Throughout the pilot process, MASP gathered data and examined the challenges and successes of issuing badges. Collaboration with the MDE has also resulted in the development of a framework for local school districts and stakeholders to develop, evaluate and accept badges. Additional offices within MDE (Career & Technical Education, Educational Technology and Data Coordination) gradually became involved in the pilots and developed a tool for the design, evaluation and acceptance of badges. MDE has initiated a technical infrastructure through a state-funded grant program that is piloting using badges as part of the data portfolio for students.

CASE STUDY: OHIO



In fall 2014, the Weatherhead School of Management at Case Western Reserve University (CWRU), in partnership with the Ohio Child Care Resource & Referral Association (OCCRRA), the Ohio Afterschool Network (OAN), and Starting Point developed a digital badging pilot project that was connected to their preexisting Youth Work Practices (YWP) training series. The YWP training series is focused on improving the practice of youth work professionals in Cuyahoga County (Cleveland). The digital badge initiative was piloted in the fall of 2014, recognizing afterschool professionals for their knowledge of and ability to demonstrate positive youth development practices. These achievements were integrated into their professional profiles in the Ohio Professional Registry.

The Weatherhead School of Management hosts and delivers the Youth Work Practices training programs and managed the design of technical aspects of the project. OCCRRA provided system integration with the Ohio Professional Registry, a centralized online system that recognizes the experience, education, credentials and training of early childhood and youth work professionals in Ohio. OCCRRA also contributed to the design and framing of the project with CWRU training organizers and OAN.

While they had originally planned to offer the YWP workshop series once for the pilot, due to demand they offered a second workshop series. A total of 35 youth workers enrolled in this project over the course of two three-day workshops held in October and December 2014. Of the 35 youth workers who enrolled, 72% of those who completed the final assessment received a badge. The new digital Youth Work Practices badge seemed to have a considerable impact on the enthusiasm and

QUICK FACTS:

Number of Pilots: 1

Badge Issuing Organization(s):
Case Western Reserve University; Ohio Child Care Resource & Referral Association; Ohio Afterschool Network; Starting Point

Badge Platform(s) Used:
Coursesites

Number of Badges Issued: 21

Badge Recipients: Youth Development Professionals

perception of the training quality by trainers and participants alike. OCCRRA, OAN and CWRU determined that implementing digital badges in the YWP training series helped build capacity in the field, aligned standards for higher quality, helped communicate standards to participants and clarified learning goals for trainers.

The value of digital badges was communicated using multiple strategies. Presentations about badges were provided to a variety of groups including at the OAN's quarterly meeting, the National Registry Conference, networking sessions for youth work professionals in the Greater Cleveland area, and by speaking with direct service workers. Feedback was requested following each of these sessions, and the feedback received was positive. This communication strategy was effective for the scope of the pilot project; however, it did not reach a large number of potential stakeholders.

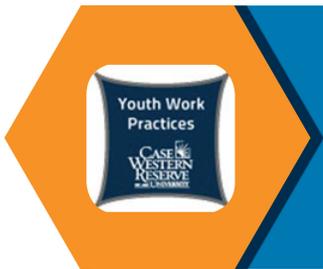
The badges were designed around an existing workshop, which was modified slightly to better accommodate the introduction of badges. While some of the design work happened prior to the issuance of badges, it continued throughout the project to ensure continuous improvement and to meet the shifting needs of participants. Monthly conference calls were held to discuss course content, logistics of badging, changes to the Ohio Professional Registry and communication strategies. The Information Technology group at

CWRU provided assistance in navigating technical issues.

Coursesites by Blackboard was selected as the badge issuance platform, and badge issuance went smoothly once staff learned the basics of the platform. As the project

progressed it was determined that many of the features in Coursesites were not being used by the participants, and staff began looking into different platforms that may be easier to use for digital badge creation and issuance.

The most challenging aspect of the project was the design of the scoring rubric and final assessment that would accurately reflect what a participant had learned and was able to do. The partners considered it important to provide participants with very clear expectations for learning, demonstration of competencies and evaluation from the very beginning. Participants in the series came from a diverse range of professional and educational backgrounds, levels of experience, and learning styles. Adjustments were made to incorporate different instructional styles, types of activities, and coaching opportunities to address these differences.



Youth Work Practices

The Weatherhead School of Management's "Youth Work Practices" badge signifies that the earner has participated in a 3-day workshop focused on understanding youth and their developmental needs including adolescent brain development, positive youth development, youth culture, and generational differences, and has developed a high-quality plan to apply these concepts in his or her work with youth.



CASE STUDY: OREGON

OregonASK began the digital badge piloting process by assembling a work group of afterschool and summer learning providers, community stakeholders and potential issuing partners. The group convened three times in summer and fall 2014 prior to the beginning of the pilot process. After the last of these pre-pilot meetings, a number of group members submitted proposals, from which OregonASK selected seven to start in early 2015. OregonASK brought the pilots together again in March to discuss their experiences, and once more in July to celebrate the work they had done and share lessons learned from the piloting process.

Below are brief summaries of a few of the pilot projects, several of which continued issuing badges after the pilot phase ended:

- Thinkersmith issued badges to classroom teachers who completed a Thinkersmith/Code.org K-8 Professional Development Workshop. The badge signifies that teachers have been adequately exposed and trained to be able to teach introductory computer science in their classrooms.
- At the Oregon Afterschool Conference, OregonASK issued badges to certify participants' attendance at the conference's professional development sessions. The badges were structured around the Oregon Registry's Core Knowledge Categories.
- The Oregon Girls Collaborative used badges to recognize participation in events that promote gender equity in STEM. The Collaborative hosted professional development forums focused on exemplary practices for engaging girls in STEM around the state, and issued badges to all participants acknowledging their efforts to support greater STEM access in Oregon.

QUICK FACTS:

Number of Pilots: 7

Badge Issuing Organization(s): Lane Community College; Thinkersmith; OregonASK; Oregon Girls Collaborative; Incite Incorporated; SKEF; ECCO High School

Badge Platform(s) Used: Concentric Sky, Badgr

Number of Badges Issued: 350 (15-40 issued per pilot and 240 issued directly by OregonASK)

Badge Recipients: Afterschool Program Providers; Community College Students; Youth Development Professionals; High Schoolers and Young Adults

- Incite Inc. runs the Career Achievement Network, a free system designed to help young adults gain employment. Incite Inc. issued a Net Achievement Badge based on their Essential Skills Certificate to young adult students. The certificate is recognized by a consortium of local employers.
- ECCO High School issued badges in Digital Proficiency based on a checklist of various online and technical skills demonstrated during courses at the high school.

OregonASK provided access to infographics, videos and other resources to help pilots communicate the value of badges to their students, teachers and schools. At project meetings, pilot programs discussed

the challenges and successes with communicating badges' value. Youth seemed to be easier to engage about badges, while school staff and superintendents were more challenging. While communication about badges was an aspect of OregonASK's

higher-level state-wide communication, the badge pilots themselves were more focused on creating systems for issuing badges within their organization than communicating with their communities. OregonASK succeeded in engaging state-level partners in the conversation about digital badges.

Pilots went through similar design processes. Each pilot completed a design worksheet including badge descriptions and criteria to help them think through what they were badging, what the standard for receiving the badge would be and how recipients would meet the standard. Pilots provided the description, criteria and evidence for their badges, and, as the technology partner, Concentric Sky coded this information into each badge image. Concentric Sky also developed a badging app, Badgr, for iPhone and Android that allowed badge earners to store and display earned badges on their phones.

For each pilot, OregonASK

facilitated the gathering of information for Concentric Sky and helped make sure badges were created and issued according to the determined criteria. OregonASK found that it was vital to have a technical issuing partner to help with the creation and distribution of badges, as most programs did not have the capacity to do it themselves.

OregonASK and their partners also found that it was necessary to fully engage communities to earn their buy-in. Some programs were unable to move forward because they lacked support from key stakeholders. Programs often required assistance in determining how to involve participants, parents, and community members in the process, in terms of communicating the importance of badges, in engaging them and in getting their buy-in.

Leadership and Team Dynamics



Lane Community College's chapter of the Pi Theta Kappa Society's "Leadership and Team Dynamics" badge signifies that students have completed a particular class, including a service learning project and a personal integration paper reflecting on life goals, leadership and service.

TheNET

Incite, Inc.'s "TheNET" badge signifies that the recipient has knowledge of essential workplace skills, has completed at least 200 hours of work experience, has attended 40 hours of Career-Based Training, has demonstrated knowledge of essential workplace skills, and has received a recommendation for employment by both his/her trainer and his/her supervisor.





CASE STUDY: RHODE ISLAND

In spring 2015, the Rhode Island After School Plus Alliance (RIASPA) partnered with the Highlander Institute to pilot digital badges at Highlander Charter School (HCS). The school serves students from all of Rhode Island, with 75% of students living in Providence. HCS's high school teaching model personalizes learning through a mastery-based progression and virtual learning tools.

The Rhode Island After School Plus Alliance began this project by working with staff from the Highlander Institute and HCS to convene a digital badge design team, including representation from a number of RIASPA and Highlander's community partners. The design team provided foundational support for the Highlander pilot—particularly in defining what a successful badging system looks like, discussing how individual badge systems might fit within a larger badging ecosystem, and identifying a list of priority questions to explore through the pilot. The design team also explored the role of partnerships with employers and higher education. The creation of badges with meaningful value for students was of particular interest.

Through Highlander's Expanded Learning Opportunities (ELOs), all high school students at HCS access real-world learning opportunities and develop personal credit-bearing projects. All students in the high school are required to complete an ELO, which are based on student interests and vary widely in focus. HCS began a digital badging pilot project to develop and award badges to recognize the diverse student competencies demonstrated in ELOs. HCS and the Highlander Institute initially identified four core competencies on which to base their digital badges: Creativity, Technology, Civic Engagement and Professionalism. Criteria and evidence to use in assessing student achievement in these four areas were also developed. In order to successfully market badges to more students, HCS later added a sportsmanship badge, which was issued to members of the basketball team. The sportsmanship badge helped to raise greater awareness and generate excitement for all of the badges.

QUICK FACTS:

Number of Pilots: 1

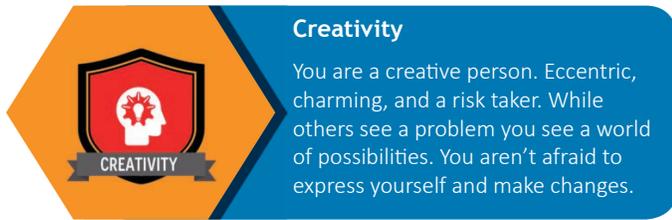
Badge Issuing Organization(s): Highlander Institute & Highlander Charter School

Badge Platform(s) Used: Achievery; Credly

Number of Badges Issued: 53

Badge Recipients: Expanded Learning Opportunity Students

Beginning in January 2015, high school students at HCS attended ELO workshops and learned about the criteria and evidence required to earn digital badges. Students were encouraged to work toward at least one of the identified competencies based on their interests. Each student could then approach the school’s ELO Coordinator to apply for the badge once he or she had met the criteria. Students who earned badges received them at the school’s award ceremony in June, after all students completed their ELOs.

A graphic for a 'Creativity' badge. It features a red shield with a white gear and a red brain inside, set against a blue background. Below the shield is a banner with the word 'CREATIVITY' in white. To the right of the shield, the word 'Creativity' is written in white on a blue background, followed by a paragraph of text.

Creativity
You are a creative person. Eccentric, charming, and a risk taker. While others see a problem you see a world of possibilities. You aren't afraid to express yourself and make changes.

HCS originally used the platform Achievery for hosting and issuing badges to students. RIASPA and Highlander Institute selected Achievery based on its demonstrated ability to manage the core technical demands of digital badging, its low cost, and the availability of ongoing technical support from the site’s developer who was based in Rhode Island. However, in April it was announced that badge making and issuing on Achievery would be suspended at the end of that month, and HCS was forced to transition its existing badges to Credly for the remainder of the pilot project.

Getting student buy-in early in the process was essential to Highlander’s badging efforts. In order for badges to be meaningful, students needed to understand the purpose of badges and be a part of the design process. RIASPA and Highlander determined it was important to have a “kick-off,” examples of successful badging initiatives given to students, and tangible evidence (i.e. actual, accessible badges). These helped to increase students’ level of engagement and understanding of what badges can mean for them.

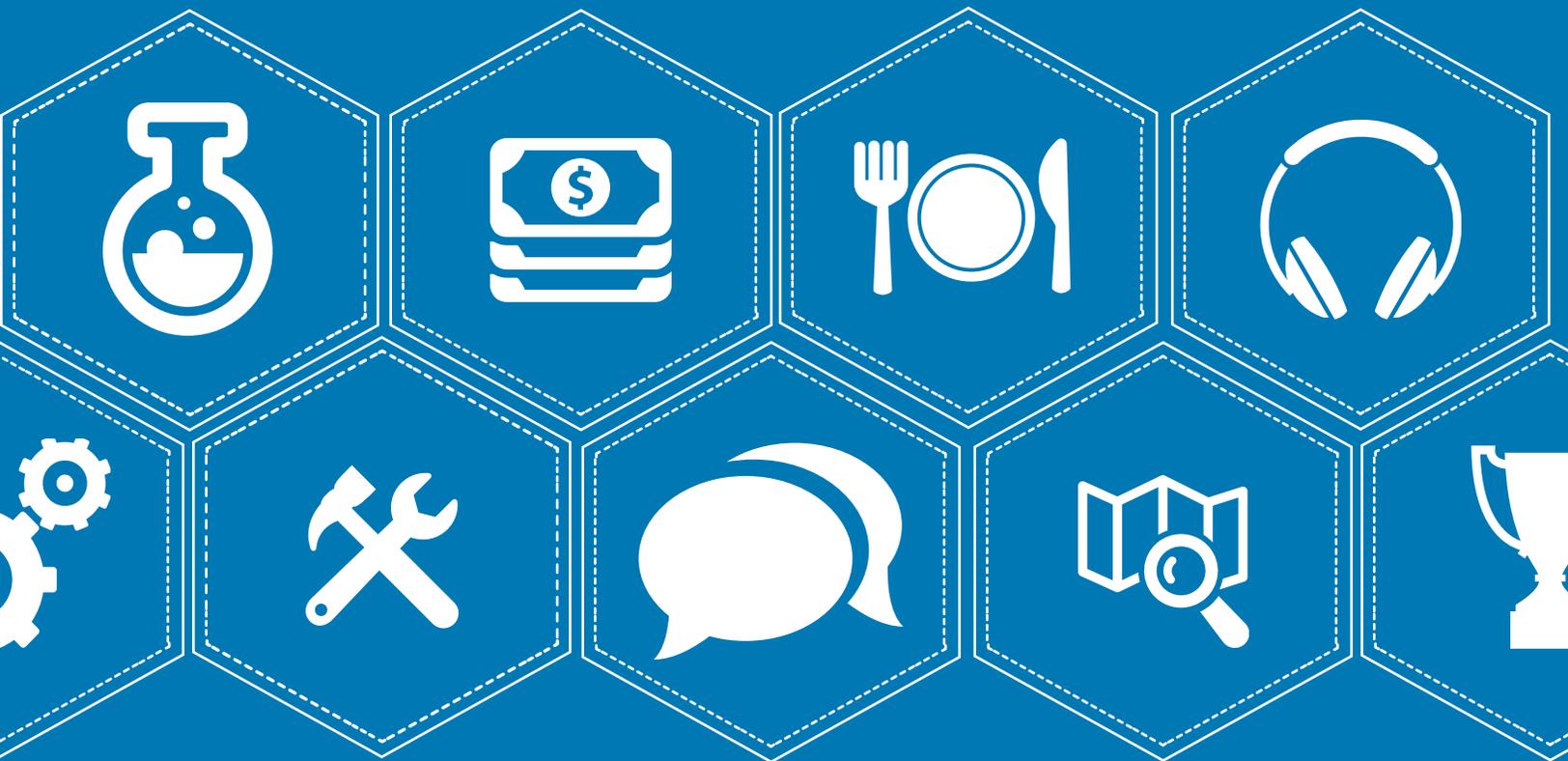
RIASPA and Highlander staff also found that a “whole student; whole school; whole community” approach was most effective. It was crucial for the entire school community to invest in the concept of badges; teachers, administrators, partners, and mentors needed to understand the evolution of badging and how it fit into their work. In the course of this pilot project, staff and leadership of HCS and the Highlander Institute spent a lot of time and energy explaining badges and their value to these stakeholders, and learned that it would have been more meaningful for industry mentors to communicate this message and to take the lead in awarding badges to students. Building a common understanding of the process and its value for students, educators and partners early on in the process was vital in ensuring that the badges could have substantial value.

A graphic for a 'Tech Head' badge. It features a red shield with a white laptop icon inside, set against a blue background. Below the shield is a banner with the words 'TECH HEAD' in white. To the left of the shield, the words 'Tech Head' are written in white on a blue background, followed by a paragraph of text.

Tech Head
You are an innovator who uses their tech skills to solve problems and design solutions. For you, technology is power.

DIGITAL BADGES IN AFTERSCHOOL:

LESSONS FROM THE FIELD



LESSONS FROM THE FIELD:

COMMUNICATION, MESSAGING & ENGAGEMENT

In order for digital badges to be meaningful for badge earners, they must be recognized by a wide variety of stakeholders. From badge earners to school leadership, local businesses to higher education, every relevant audience must be able to understand the purpose, role and value of badges for those badges to truly be impactful for learners. Below you can find some valuable lessons learned from badging pilot projects around effective communication and messaging strategies:

Get student buy-in early in the process. It is vital for students to understand the purpose of badges and be a part of the design process for them to perceive the badges as meaningful.

- In **Maryland**, Wide Angle Youth Media used digital badges to expand students' awareness and understanding of their digital footprint. Youth participating in the WAYM badge pilot were excited about the potential for future employers to recognize the skills that digital badges represented, ultimately linking their badges to their individual LinkedIn accounts to promote and differentiate themselves.

Get the entire school community to invest in the concept of badges. It helps to bring external partners to the table early on and engage them in the badge design process.

- In **Rhode Island**, Highlander Charter School staff found that it was important for teachers, administrators, community partners and mentors to understand the evolution of badging and how it fit into their work. They also determined that it was extremely valuable for industry mentors to communicate this message and sometimes directly issue badges to students.
- A number of **Oregon's** pilot sites provided opportunities for participants, parents and community members to get involved in the process, which helped build public awareness around the value of badges.

Help your partners develop a common understanding of the badge issuance process from the very beginning. A common vision of badges and their value for students, educators and partners is necessary for any badges effort to succeed. Stakeholders must understand that digital badges can provide afterschool and summer learning programs with a means to assess and display informal learning and college/career readiness skills in a way that is motivating and appealing to students.

- In **Ohio**, Case Western Reserve University (CWRU) and the Ohio Child Care Resource and Referral Association (OCCRRA) found that building a common understanding of what badges represented was a crucial part of engaging employers and participants and getting them fully invested in badging efforts.
- In **Michigan**, programs provided badge-focused professional development to staff, which proved vital to getting their buy-in for the implementation of the process. Simple tools and exercises reduced staff resistance to the new system.

Develop targeted communications strategies to share your vision for badges with your broader audience.

Using different communications strategies for different groups (i.e. students, program staff, and school and community members) can help expand your reach and get buy-in from varying audiences.

- In **Rhode Island**, Highlander Charter School found that it was helpful to design badges as a commodity that could be accessed by recipients from the beginning to show stakeholders tangible examples of badges.
- In **Michigan**, programs found that providing opportunities for staff to go through the process as badge “earners” helped to familiarize them with terminology and ease the learning curve.
- In **Oregon**, pilot sites found that two particular communication tools were most successful in conveying the value of badges:
 - Infographics proved to be an extremely powerful tool to illustrate the importance of the role that badges could play within education.
 - Success stories were crucial for showing the impact of digital badges, especially for school professionals and community organizations that were not yet convinced that there was precedent and available infrastructure for implementing a badging system.

Design your badges and badge systems to have lasting value and recognition for earners. The value of badges is dependent upon the relationships you build with program partners and stakeholders. The more that schools, community organizations, businesses and institutions of higher education understand and recognize a badge, the more powerful it will be.

- In **Ohio**, CWRU and OCCRRA staff gave frequent presentations and continuously held discussions with key stakeholders to guarantee that their professional badges would remain relevant for earners on an ongoing basis. They also took steps to ensure that badge recipients were able to include badges in their professional profiles in order to increase the badges’ visibility and value.
- In **Michigan**, program staff found that badge issuers added intrinsic value to the badges. Badges offered by or endorsed by well-known or respected entities held more value to both the recipients of the badges and to those with whom the badge was shared.

DESIGNING BADGES & BADGE SYSTEMS

Stakeholder buy-in alone is not enough to make badges meaningful. A badge is only as valuable as the learning that it represents, so it is important for programs to design their badges to reflect their goals and impacts, and to ensure that the badges are based on valid and transparent criteria and assessments. Below we provide some recommendations for how to make a badge system that is consequential:

There is no need to reinvent the wheel; badge frameworks should be designed around skills that are already being measured and focused on learning objectives that are already in place. Meaningful badges require rigorous assessment. If badges are not backed up with high-quality learning assessments, the badge will not be a meaningful signifier of the recipients’ knowledge, skills or achievements.

- In **Oregon**, the most successful pilots aligned the badge with an existing standard such as a licensing registry, a class syllabus or national accreditation. Having a clear outline of objectives and evidence of meeting the standard is crucial in the implementation.
- In **Rhode Island**, Highlander Charter School staff came to the conclusion that developing digital badges for a collective set of programs using universal criteria was a powerful way to maximize the badges' impact. Staff were concerned that competencies and assessment criteria developed independently may not be viewed as valid, and created a number of badges that used widely recognized and vetted skills and criteria to help persuade stakeholders that Highlander's badges had value.

The criteria and assessments to which badges are tied must be properly addressed in the activities for youth.

- In **Michigan**, program staff developed separate levels of badges based on the type of engagement of the learners to help ease programs into the badge issuing process.
- Also in **Michigan**, program staff designed badges around existing systems/curriculum and programs where staff were already confident in the learning objectives. Activities and programs were often easily translated into the anatomy of the badge.

Design your badge systems to be both flexible and verifiable. Striking the right balance can be tough, but both flexibility and verifiability are vital to a badging initiative's success. Providing a degree of flexibility will help you get buy-in from students, program staff and other partners, but for badges to retain value in the long term they must be based on pre-vetted criteria and evidence.

- At Highlander Charter School in **Rhode Island**, program staff decided to let students select the competency or competencies that were most important to them from a defined selection. If all students earned the same badges or the same combination of badges, staff believed that the overall value of each badge would be diluted, so they chose to allow students to select their own personalized pathways to retain the value of the badges.

Engage partners in the design process from the very beginning. Developing strong, ongoing partnerships and engaging stakeholders in the design process will make badges more valuable and meaningful for earners. Strong partnerships also help ensure that the badge issuers have the credibility required for the badges to become widely accepted and recognized.

- In **Michigan**, programs deliberately consulted with the intended recipients and potential reviewers (employers) when creating the badge criteria, frameworks and ecosystem. Parents, educators and program staff also provided valuable insights to ensure that the badges and badge systems were meaningful to the recipients.
- In **Rhode Island**, programs collaborated with employers and institutions of higher education during the design process to ensure that the badges recognized competencies and used assessments that were valuable to their partners.
- Wide Angle Youth Media in **Maryland** found that youth were more likely to actively apply and promote the badges they had earned when they were able to participate in the badge design process and help determine how the badges were used.

TECHNICAL REQUIREMENTS & BADGE PLATFORM SELECTION

One of the more daunting aspects of introducing digital badges can be selecting and setting up the required infrastructure to enable programs to offer badges and allow youth to claim their badges. There is a wide array of badge hosting platforms available and finding time to prepare staff to design and issue badges can be a challenge. Below we have pulled together the most salient recommendations from the pilots about how to address the technical and infrastructure supports necessary for the introduction of badges:

Choose your badge platform carefully and deliberately. Most badge platforms are still evolving and it is often difficult to determine which platform will serve you best. It is good to look into all of the available platforms and determine what tools and interfaces work best for your program's needs.

Build in time and intentional support mechanisms within your programming to help students receive and display badges. While some students may be technologically savvy, sometimes their understanding of technology doesn't match up with how digital badges work. Students often need help and support with using and syncing their badges on multiple platforms, and may even need assistance keeping track of their login information.

Engage one or more technical partners to help with the back end creation and distribution. Most programs will not have the time, resources or expertise to handle the technical aspects of badge issuance by themselves. Having a partner to help along the way can save programs time, money and frustration.

- **Oregon's** technical partner, Concentric Sky, created an app called "Badgr" to hold recipients' digital badges, making it easy and fun for program participants to access and display their badges. A number of Oregon's pilots also relied on Mozilla Backpack to create and issue badges.
- In the **Michigan** pilots, program staff found that developing partnerships to share ideas and get technological help was a turning point, after which everything else fell more or less into place. Once the difficult task of creating the platform was accomplished, they found that making the badges themselves was actually quite fun.
- In **Ohio**, program staff found that testing the badge issuing systems in advance and securing ongoing technical support were vital to their badging initiative. Program staff fortunately left enough time to troubleshoot a number of unexpected issues that arose, but in the future they expect to include even more lead time to thoroughly test all technology systems and familiarize team members with the systems prior to issuing badges.

BADGE ISSUING PLATFORMS AND SOFTWARE:

The badge pilots used a variety of badge issuing platforms and related software over the course of their projects. Below we summarize their experiences with and opinions of some of these platforms:

ACHIEVERY:

- Over the course of the pilot period, **Maryland**, **Rhode Island**, and **Ohio** all used the **Achievery** platform to issue badges. While Achievery was flexible, easy to use, published badges to the **Mozilla Backpack**, and had the ability to include significant information about the badge, *Achievery unfortunately ceased issuing badges in spring of 2015, forcing the three pilots to find another hosting platform.*

CREDLY:

- When **Achievery** ceased issuing badges, **Rhode Island's** programs chose to move forward with **Credly** which proved valuable while the programs were exploring the concept of digital badges and engaging students in badge design. The Credly interface, however, was not without its own challenges. The interface was not always user-friendly, and users could not view or access their badges without creating an account. This was a barrier for programs when trying to create buy-in, given that recipients and others have little reason to visit the website until a badge has been awarded.
- **Credly** offers fee-based plans that allow badge issuers to require badge verification, but Highlander Charter School opted not to proceed with this option due to the fact that it was cost-prohibitive and confusing for teachers, who would need to allow an outside agency to verify and credit student work.
- **Maryland** also chose to move forward with **Credly** when Achievery ceased issuing badges because it integrated easily with LinkedIn. The programs were slightly disappointed that Credly did not offer some of the flexibility and tools that the Achievery platform had provided.

CONCENTRIC SKY & BADGR:

- For the **Oregon** pilots, OregonASK's tech partner **Concentric Sky** created an open-source platform for issuing, endorsing, and managing badges and tracking user achievement called **Badgr**. The Badgr platform can be accessed both through web browsers and through mobile applications. The pilot programs found the streamlined Badgr mobile application to be especially useful for educating the public about what digital badges were and how they worked.

COURSESITES:

- The **Ohio** pilot initially used **Coursesites** to award initial badges, but found that it overcomplicated the issuance process. It took staff significant time to become familiar with the technical badge-delivery system through Coursesites. One reason for choosing Coursesites was to provide a vehicle for participants to access all materials electronically as well as Coursesites' ability to award badges directly to the participants' Mozilla Backpack accounts.

MOZILLA BACKPACK:

- In **Ohio**, the OCCRRA technical group found that the **Mozilla Backpack** provided a variety of straightforward, easy-to-use tools for displaying publicly-viewable badges. The OCCRRA team chose a viewer option that allowed the participant to enter the email address associated with the Backpack account and to display those badges the participant chose to make public. Badges could be created and formatted a variety of ways, and so staff made sure to build in time for trial and error during the testing process. In the long run, the OCCRRA team was able to offer the badges display option to all professionals, not just those who participated in this pilot project.
- Programs in **Michigan** also found **Mozilla Backpack** to be a very effective open digital platform for badge storage. Mozilla Backpack allows anyone to collect and display badges from multiple badge issuers and issuing platforms.

RESOURCES:

About Open Badges, <http://openbadges.org/about/>

Mozilla Backpack, <http://backpack.openbadges.org/backpack/login>

Afterschool Snack: The Potential of Digital Badges, <http://www.afterschoolalliance.org/afterschoolsnack/ASnack.cfm?idBlog=06A02719-215A-A6B3-02C90C4DA808594D>

Badge Alliance – Why Badges, <http://badgealliance.org/why-badges/>

U.S. Department of Education - Digital Badges for Learning, <http://www.ed.gov/news/speeches/digital-badges-learning>

The Teacher’s Guide to Badges in Education, <http://www.edudemic.com/guides/the-teachers-guide-to-badges-in-education/>

Afterschool Alliance – Connected Learning Issue Brief, http://afterschoolalliance.org//documents/Afterschool_and_Connected_Learning.pdf

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The Afterschool Alliance is a nonprofit public awareness and advocacy organization working to ensure that all children and youth have access to quality afterschool programs. More information is available at afterschoolalliance.org.