Emblem of Achievement:
Digital Badges in the Colorado Helps Advanced Manufacturing Program

What was the Colorado Helps Advanced Manufacturing Program? The Colorado Helps Advanced Manufacturing Program (CHAMP) was a four-year, U.S. Department of Labor Trade Adjustment Act-funded project under which seven Colorado colleges, a technical school and a university worked with employers to develop a pipeline of qualified advanced manufacturing workers.

What is the Rutgers University Education and Employment Research Center? The Rutgers University Education and Employment Research Center (EERC) provides research and evaluation on policy and practice to education, government, philanthropy, business, and workforce development organizations. As the third-party evaluator for CHAMP, EERC assessed how the program worked and how successful it was in meeting its goals.

What are digital badges? Digital badges are a form of credential, stored and shared online, that represents knowledge and skills individuals acquire in formal and informal settings. They allow students to showcase what they've learned; make it easier for employers to identify applicants whose skills match up with job requirements; and help academic institutions explicitly represent the skills that students acquire in a particular course or program.

Why did the CHAMP colleges adopt digital badges? The colleges launched their digital badge system in 2015 in response to the growing number of unfilled jobs in Colorado's advanced manufacturing sector. One reason jobs go unfilled is that it isn't always clear from certificates, degrees, and transcripts whether applicants have the specific skills employers need.

How did the colleges develop their digital badge system? Designers worked with employers and faculty to identify the skills most needed in the advanced manufacturing industry and determine which skills were taught in which courses and how they were assessed. For each skill, the colleges set four tiers of competence: "proficient," "expert," "mastery," and "excellence." (At the request of employers, "proficient" was eventually dropped.) The first series of badges the colleges developed were in technical math (i.e. geometric measurement and ratios), machining, and engineering graphics.

What software did the colleges use for their digital badge system? The colleges adopted Open Badges, a group of technical standards developed by the MacArthur Foundation, Mozilla, and the Peer2Peer University that makes it possible for anyone to confirm the authenticity of a digital badge. Following a Request for Proposals, the colleges selected Credly, a leading platform for storing, managing and sharing badges.

How did students earn digital badges? Students taking the Technical Math for Industry online course automatically received a badge if they scored 80 percent or higher on the course's test. To earn a badge in machining, students had to pass a test or complete a project aligned with criteria set by the National Institute of Metalworking Skills. To earn a badge in engineering graphics, students had to complete their coursework with a grade of 80 percent or higher or submit a portfolio for faculty review.

How many badges have been awarded so far? The colleges have created 50 badges and awarded a total of 671. As of May 2017, the badges have been viewed more than 79,500 times on social media or by direct link.

What was the response from students, faculty and employers to the digital badges? The majority of students interviewed by the evaluation team were not yet aware of the badges or how to use them in their job search. Overall, faculty members were optimistic about badging's potential, but some expressed concern it would become a competing credentialing process, drawing students away from certificate and degree programs. Like the students, most employers interviewed by the evaluation team were unaware of the badges. College faculty and staff noted that employers are interested in ways to accelerate the credentialing process but are not yet familiar with the benefits of badges or the terminology associated with them.

What is the future of the colleges' digital badge system? The Colorado Community College System has secured funding for Credly through September 2018 and established a new position that will oversee digital badging. Individual colleges are working with employers to refine existing badges and develop new ones in subjects including drone manufacturing and civil engineering. The colleges are also considering ways to "stack" badges to create new types of certificates. Some are beginning to sponsor training programs or workshops for students to help spread the word about digital badges.

To read EERC's full report on the CHAMP navigators and find out more about their evaluation of the program, visit http://smlr.rutgers.edu/content/colorado-helps-advanced-manufacturing-program-champ-evaluation.