



# Improving Learner Outcomes with Workforce-Relevant Credentials

Colorado Community College System Case Study



# Overview

In 2013, the state of Colorado experienced high unemployment rates and thousands of jobs went unfilled. Advanced manufacturing jobs were particularly in-demand and a huge pool of skilled candidates was available from the state's community college system—but there was no way to connect the students to the opportunities. Colorado Community College System (CCCS) realized there needed to be a way to connect skilled workers to employers by making the skills, abilities, and knowledge of its students more transparent.

To combat a trend of missed opportunities for its learners, the college system launched a digital credentialing program to help learners share skills that mattered most to potential employers. Centered on creating workforce-relevant credentials in conjunction with employers, the program has garnered praise and improved job placements for students.

## Background & Challenges

Like many higher education institutions, Colorado Community College System used traditional transcripts to record progress of its nearly 140,000 student population, which it serves across 13 colleges over 39 campuses. But, it became apparent that the system lacked a comprehensive, agile way to identify and track workforce-relevant skills and competencies, resulting in missed opportunities for its students.

In October 2012, Hurricane Sandy struck the eastern seaboard and electricians and high voltage workers were in short supply. While the state of Colorado graduates a significant number of certified electrical linemen through Trinidad State Junior College, there was no database that could help match the ample supply of skilled workers to those needed for relief efforts.

The next year, Colorado announced that there were 15,000 unfilled jobs in advanced manufacturing within the state—with a prediction that the number would

grow over the next few years and impact the ability to bring new business to the state. Employers were struggling to find candidates with the competencies they needed. CCCS had a strong advanced manufacturing program, but faced the same challenge that students were missing out on employment opportunities because CCCS did not have a way to identify students by skills and competencies and share that information with potential employers.

The college system knew it needed a way to identify mastery-level skills and abilities within its program pathways, and found an innovative technology solution in digital credentials.

## Solution: Digital Credentials

Colorado Community College System opted to create a digital credential program for several reasons:

- » Digital credentials filled the communications gap between a traditional transcript and the full picture of a student's knowledge, skills, and abilities.
- » They provide a way to identify in-demand skills and competencies and align those skills with academic curriculum.
- » Digital credentials provide a way to connect students to opportunities based on their skill set.

- » Metadata attached to every digital credential provides details on requirements for earning the credential, which helps employers searching for candidates with a particular competency.
- » A digital credentialing platform was able to support a system-wide solution for all of the college system's 13 campuses.

## Creating a Digital Credentialing Program

To build a digital credentialing program that would be impactful, CCCS plotted its course in three phases: securing funding and identifying areas of focus, developing workforce-relevant credentials, and selecting a digital credentialing platform.

### Phase One: Funding & Focus

The first step for Colorado Community College System to launch a brand-new digital credentialing system that made skills and competencies transparent was securing funding. The system's Special Projects and Grants department led the project, and leveraged funding through the Colorado Helps Advanced Manufacturing Program, which was part of the U.S. Department of Labor's Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant program. Next, the group created a system-wide governance plan, framework, and taxonomy for the digital credentials. Since there was an overwhelming demand for advanced manufacturing jobs, CCCS launched digital credentials focused on its advanced manufacturing academic programs.

### Phase Two: Workforce-Relevant Credentials

With funding and focus identified, CCCS initiated a system-wide effort to develop workforce-relevant credentials with the help of sector partners which advanced manufacturing employers of all sizes, along with representatives of economic development

councils, the Colorado Department of Labor, and the Colorado Workforce Development Council. This involved meeting with regional employers and industry representatives to learn more and answer questions: What were the critical jobs which were left unfilled? How did employers define the skills and competencies required for success within the advanced manufacturing industry? What were the specific competencies needed for those jobs? Were there any critical skills applicable across the industry that could be better identified in the workforce?

Armed with research, CCCS identified where they could revise and redesign existing course content and program pathways to identify the workforce-relevant skills that employers were seeking. The college system then mapped those skills to stackable, digital credentials in an effort to empower the students who earned them with transparent and portable evidence of their abilities.

The program launched with three sets of digital credentials for Machining, Technical Math, and Engineering Graphics, which were represented visually with digital badges. Once a student obtained mastery skill level within projects nested inside the curriculum, he or she was awarded a digital badge which verified the competency. The credentials were issued at the system level, instead of at the college level, which created a standard level of performance statewide that aligned to industry needs. Every credential is represented visually by a digital badge, which students can share on their professional networks, resumes, and online portfolios.

### Phase Three: Platform Selection

To power its digital credentialing program, Colorado Community College System sought an industry-leading platform that would also act as a partner in implementing and launching its program. From a technical standpoint, they sought a cloud-based platform that could: issue and manage credentials across the 13 campuses in the CCCS system; provide

comprehensive reporting on credentials earned, shared, and displayed; be easily used by employers seeking candidates with specific skills; could operate independently from the student information system; and be Open Badge compliant.

The college system selected Credly as its digital credential platform for its superior product and personalized customer support in developing, launching, and monitoring its program.

## Outcomes

Colorado Community College System began issuing badges in 2015, and has issued more than 1,200 badges through the end of 2018. The digital credentialing program has been praised internally and externally, and has achieved meaningful results in establishing a successful workforce development program and increasing job placements for students.

Upon accepting a credential, earners can share it on professional and social networks. This social sharing generates valuable organic marketing for the program, and has resulted in nearly 50,000 free social media impressions since launch.

## Workforce Development

Forging relationships with local employers and business leaders helped CCCS create meaningful, workforce-relevant credentials that empower students. The digital credentials help create learning and career pathways for students, and help address the communications gap between employers and educators.

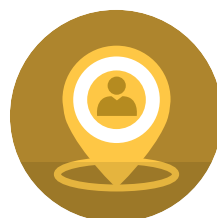
The credentials became an in-demand currency across the region's advanced manufacturing industry because employers participated from the outset to define the criteria, competencies, and assessments that the CCCS digital credentials should support, and understood the value of the credentials within the workforce. This two-way communication also helped employers create job descriptions better aligned to the

skills and competencies they really needed.

In addition, CCCS students report the credentials are highly valuable in their job search, and employers indicate the data contained in the creden-



**50,000**  
Social Media  
Impressions



▲ Increased  
Job Placements



Created Learning &  
Career Pathways

tials is highly informative in talent management.

## Job Placements

With a robust workforce development program in place powered by digital credentials, job placements for students started to increase.

Employers valued the ability to see transparent descriptions of relevant skills and recognized significant overlap with their own needs, and began seeking CCCS students with specific digital credentials. They searched LinkedIn for potential candidates with CCCS credentials, as well as contacted CCCS academic



programs directly to fill open positions.

“One afternoon, I received an email from a Denver-based architecture firm looking to fill three positions which had been open for six months. They had heard about our engineering graphics digital badges, and wanted to learn more about the competencies, assessment, and evidence that went into earning that badge,” says Brenda Perea, former Instructional Design Project Manager who worked on the launch of the CCCS digital credential program. “CCCS was able to supply the firm with a list of students who had earned digital credentials to match the employer’s specific needs, and the firm filled three positions within 72 hours.”

### **Expansion of Digital Credentialing**

After the successful launch of digital credentialing in advanced manufacturing, CCCS expanded the program to include faculty professional development, noncognitive skills for healthcare professionals, and non-credit professional development training for local employers. The college system is also utilizing digital credentials to identify competencies employers need to upskill the existing workforce in conjunction with training supplied through the Colorado First and Existing Industry (CFEI) program.

## About Credly

Credly is helping the world speak a common language about people's knowledge, skills, and abilities. Thousands of employers, training organizations, associations, certification programs, and workforce development initiatives use Credly to help individuals translate their learning experiences into professional opportunities using trusted, portable, digital credentials. Credly empowers organizations to attract, engage, develop, and retain talent with enterprise-class tools that generate data-driven insights to address skills gaps and highlight opportunities through an unmatched global network of credential issuers.