There’s a profound shift taking place in the way employers view a new hire's education and qualifications. That change is described by Ryan Craig, author and managing director of University Ventures—an education-focused venture capital firm that invests in entrepreneurs and institutions—as “a shift from degree-based hiring to competency-based hiring.” The competencies that today’s employers find increasingly important are derived from the somewhat vague realm of “soft skills” into the more defined category called “21st Century Skills.”

The nationwide research that has gone into identifying the crucial skills now demanded by employers is substantial. While no exact and final list of skills has been reached, researchers and employers generally agree on the following four critical areas:

- Collaboration and teamwork
- Creativity and imagination
- Critical thinking
- Problem solving

Employers increasingly are deeming these skills to be critical for their organization's success because they reflect the set of abilities and work-related behavioral traits that are essential for team collaboration, effective communication, resilience, adaptability, and strong leadership. And when it comes to hiring, employers are as interested in a candidate's disposition as they are in his or her academic achievements. In fact, employers are signaling that college degrees are playing a somewhat lesser role in their evaluation process for new hires. A stellar GPA and a diploma from a renowned university are no longer by themselves considered an adequate proxy of the essential soft skills that are important to employers. But how can people who are looking for work, or seeking advancement within their organizations, demonstrate that they are well-versed and accomplished in these 21st Century Skills?

**Digital Badges Show Skills and Achievements Beyond the Résumé**

A digital badge is an online representation of accomplishments such as the completion of a project or training, mastery of a skill, or accumulation of experience. They are issued by schools, universities, and community and professional organizations. The earner can display a badge on social media sites, online portfolios, blogs, and résumés.

Shannon Wells, technical assistance provider (TAP) for employability skills with the California Community Colleges (CCC), says “digital badges function as micro-credentials that represent a specific acquisition of a skill, a knowledge area, or achievement. For learners, the badge can supplement their focused degree coursework, demonstrating additional training or special projects undertaken that resulted in the development of one of the many in-demand 21st Century Skills. The granular level of detail and information provided by digital badges is valued by industry and employers because it provides a much more comprehensive picture of a candidate and gives insight into who they are.”
How Digital Badges Help Students and Workers

Digital badges help students and workers demonstrate an additional dimension of their learning: that which happens outside of the classroom. This type of learning is referred to as informal learning, which author Jay Cross describes on his blog Informal Learning as “the unofficial, unscheduled, impromptu way we learn by observing others, being mentored, and mentoring others.” Digital badges are of great value to the bearer because they can show a detailed account of an otherwise unrecognized pathway of accomplishment and skills development. Other benefits of digital badges for students and workers include the following:

- Digital badges motivate learners to pursue their interests and passions by providing them with a verifiable credential.
- Digital badges can help learners connect with potential collaborators and employers.
- Digital badges help workers transfer their on-the-job learning across different industries.

How Digital Badges Help Employers

- A digital badge allows a recruiter to access metadata showing how and when the learner earned a badge, who issued it, and the assessments that were involved to achieve the badge.
- As a stackable credential, a digital badge not only demonstrates multiple achievements but also highlights the specific competencies that employers are looking for in new hires.
- 21st Century Skills badges help employers find candidates who are the best potential cultural fit, which helps ensure the success of their new hires.

California Community Colleges’ Pilot Program Expands 21st Century Skills Training and Digital Badges

Many colleges and universities nationwide are beginning to integrate a 21st Century Skills curriculum into their academic programs. The California Community Colleges system began a pilot program in 2015 in which educators, counselors, career advisers, and workforce development specialists were trained to deliver the 21st Century Skills curriculum as developed by New World of Work, a California community college based organization that specializes in career technical education, and economic workforce development. Staffers from 22 partner colleges have been trained.

The California Community Colleges also now provide students the opportunity to earn 21st Century Skills digital badges that are issued by LaunchPath, an online work-based learning program management tool developed and managed by the Foundation for California Community Colleges and Linked Learning Alliance. LaunchPath issues digital badges using the Mozilla Open Badges Specifications, which means badges are portable. The benefit of an open badge system is that learners can collect badges from multiple sources and display them across the web on social networking sites and digital résumés.

A 2013 report titled “Expanding Education and Workforce Opportunities Through Digital Badges,” from the Alliance for Excellent Education and the Mozilla Foundation, describes three key components of the digital badge system:

1. **Badges issuers**, which are individuals, schools, employers, institutions, communities, or groups that create credentials to demonstrate mastery of skills and achievements

2. **Badges earners**, who are individuals who want to demonstrate their achievements to various audiences

3. **Badges consumers**, which are education providers, individuals, employers, communities, or other groups that are looking for people who possess the skills or achievements symbolized by a badge.
Wells describes the process for earning 21 Century Skills badges within the community college classroom as “academic based.” She explains, “The instructors receive a certification after they complete the New World of Work 21st Century Skills training, which makes them versed in the curriculum and in the digital badge-earning process. During the pilot program, the instructors have the flexibility to use the digital badges as makes the most sense for their course content. Some instructors are offering the 21st Century Skills digital badges as extra credit or as a special project that students can sign up for. After instructors deliver the lessons in their class, they provide the student with the opportunity to take the assessment and they can potentially earn a digital badge in one of ten 21st Century Skills.” Those skills are based on extensive research conducted over four years by New World of Work and include the following:

- Adaptability
- Analysis/Solution Mindset
- Collaboration
- Communication
- Digital Fluency
- Empathy
- Entrepreneurial Mindset
- Resilience
- Self-Awareness
- Social/Diversity Awareness

In a recent article for the California Economic Summit, Amber Nelson describes how California Community Colleges are incorporating a 21st Century Skills curriculum into for-credit classes:

On campus, community colleges are implementing New World of Work in a variety of ways. Shasta College offers a series of campus-wide workshops and also integrates the materials into their business and leadership classes. Other colleges also embed the learning in credit-based courses. West Hills College Coalinga runs the materials through their nursing rotations. At Santa Rosa Junior College, the curriculum is presented via a class called “Soft Skills for Business.” Other community college partners include Lassen College, Columbia College, Folsom Lake College, American River College, Hartnell College, Skyline College, Santa Barbara City College, Pasadena City College, and Southern California Biotechnology Center at Miramar College.

**Concerns About the Proliferation of Digital Badges**

One major challenge facing digital badges is an apparent lack of standards, making it difficult for consumers of these rapidly propagating credentials from assessing their value. A 2013 report titled “The Potential and Value of Using Digital Badges for Adult Learners” suggests, “The criteria developed for a credible badge must align to educational standards, established business standards, or competency frameworks within specified professions or populations.”

Regarding the credibility of the 21st Century Skills badges earned with the California Community Colleges system, Wells says, “The value of the digital badges earned by our students rests on three strong pillars of credibility.” They are:

1. The badges are earned within a rigorous academic environment.
2. The digital badge program has considerable oversight regarding the assessment of learning outcomes.
3. The badges earned by students are based in the New World of Work 21st Century Skills curriculum, which was researched and developed over four years to meet the needs of learners and employers.

Other prominent organizations offering opportunities to earn digital badges include MIT, Yale University, Georgetown University, NASA, the U.S. Department of Education, and the Smithsonian Institution.
For more information on 21st Century Skills digital badges within the California Community Colleges, please contact:

**PROGRAM CONTACTS**

**Shannon Wells**  
Technical Assistance Provider (TAP) – Employability Skills  
California Community Colleges (CCC), Doing What MATTERS for Jobs and the Economy  
Email: swells@shastacollege.edu

**Tim Aldinger**  
Director of Workforce Development Services  
Phone: 916.491.4499  
Email: taldinger@foundationccc.org

**TECHNOLOGY CONTACTS**

**Bryan Miller**  
Vice President of Communications and Technology  
Phone: 916.498.6703  
Email: bmiller@foundationccc.org

**Emily Robinson**  
Technology and Special Projects Director  
Phone: 916.498.6724  
Email: erobinson@foundationccc.org

---

**About New World of Work**

The California Community Colleges (CCC) is the largest system of higher education in the nation with 72 districts and 113 colleges serving 2.1 million students each year through workforce training, basic skills courses in English and math, and preparation to transfer to four-year colleges and universities. The Doing What MATTERS for Jobs and the Economy framework of CCC, which funds the New World of Work program, collaborates with employers, workforce development boards, educators, and research organizations across the country to build college-and career-ready, 21st-century employability skills.