



Innovation in Higher Education Case Study

Colorado's CareerWise Apprenticeship Program

NATIONAL CONFERENCE of STATE LEGISLATURES | AUG. 2018

Introduction

Efforts to strengthen connections between K-12 and postsecondary education and workforce sectors are underway across the nation. Several states are developing increasingly robust apprenticeship systems as a means of advancing their statewide educational attainment and workforce development goals. Apprenticeships are work-based learning programs in which industry professionals and educational institutions partner to align on-the-job training with curriculum and instruction. These partnerships are challenging to broker and maintain, and intermediary organizations play a vital role in negotiating the parameters and sustaining the partnerships required to make apprenticeships effective.

CareerWise Colorado is an intermediary organization receiving national attention for its approach to apprenticeship learning. As a nongovernmental, nonprofit group that supports youth apprenticeship in Colorado, CareerWise facilitates strong partnerships between businesses, community, government and education to design an intentional, data-informed apprenticeship system that is in each entity's mutual interest, and addresses Colorado's education and workforce challenges. This is accomplished by providing meaningful, rigorous career technical education and opportunities for high school students.

CareerWise is a three-year apprenticeship. Participating 11th- and 12th-graders spend 16-24 hours per week at their apprenticeship site, and the rest of their time is spent in a traditional school setting or at a community college earning academic credits toward both a high school degree and an associate degree. The apprentices spend an additional year in the apprenticeship after graduation, getting more work experience and earning more college credits.

CareerWise provides benefits to students, businesses and education providers:

- **Benefits to students:** Upon completion, students have valuable workforce experience, recognized industry certifications and debt-free college credit. They can then go directly into the workforce, continue their higher education or both.
- **Benefits to businesses:** The program takes three years to complete. This ensures that hosting businesses receive a return on their investment per worker produc-



tivity by the end of the program. Also, by participating in specific program designs, hosting businesses can craft and attract a talent pipeline of skilled workers.

- **Benefits to schools and colleges:** Apprenticeships, like other kinds of work-based learning, contribute to measurable, positive outcomes. Work-based learning increases student engagement and attendance, graduation rates and credential and college-credit attainment across the board.

In its first year, CareerWise offered apprenticeships in four career pathways, including advanced manufacturing, information technology, financial services and business operations. It added health care as a fifth pathway in its second year. CareerWise's first cohort numbered 116 participants, expanding to 126 participants in its second year. The organization's strategy is to reach 10 percent of all Colorado high school students within 10 years.

Colorado Policy Context

Prior to CareerWise, the Colorado General Assembly enacted several pieces of legislation to align education and workforce efforts over the last 10 years. For CareerWise to exist, four types of enabling policy had to be in place: career pathways, concurrent enrollment, guaranteed transfer and competency-based learning policies.

CAREER PATHWAYS

CareerWise apprentices complete programs in one of five articulated career pathways: advanced manufacturing, information technology, financial services, business operations and health care. Each pathway offers a clear sequence of stackable credits and credentials, which enables the student apprentices to secure industry-relevant skills and certifications for high-demand occupations. The process of designing the pathways was catalyzed in 2013, when the Colorado General Assembly enacted [House Bill 1165](#). This bill required community colleges, in conjunction with the Department of Labor and Employment, the Colorado Workforce Development Council, the Department of Higher Education and the Department of Education, to design a manufacturing career pathway for the skills needed for employment in Colorado's manufacturing sector.

Colorado built upon this first pathway with the passage of [House Bill 1274](#) in 2015. This bill directed the Colorado Workforce Development Council to coordinate the relevant agencies and industries to design career pathways for critical occupations in growing industries. The state council has since added pathways in construction, information technology, health care business operations and cybersecurity.

CONCURRENT ENROLLMENT

CareerWise apprentices take classes at community colleges. Concurrent enrollment policies allow high school students to take college credit-bearing courses. In 2009, with the passage of [House Bill 1319](#), Colorado expanded the state's concurrent enrollment programs and created the Accelerating Students Through Concurrent Enrollment (ASCENT) program. ASCENT allows eligible students to earn both a high school diploma and a college certificate or associate degree over a five-year extended high school experience.

Colorado revisited its concurrent enrollment policy in 2015 with [House Bill 1275](#), which allows high schools to award credit for students to count toward apprenticeship and internship pro-

grams. The bill also established a tuition assistance program for students enrolled in CTE certificate programs.

GUARANTEED TRANSFER

One CareerWise feature is that, upon completion, apprentices have debt-free college credit toward another postsecondary credential and the option of furthering their education. A barrier to credit transfer is that institutions sometimes do not accept credits from other institutions, or the credits do not count toward a degree. Guaranteed transfer policies ensure that the college credit students earn not only transfers to the institution they attend, but that the credits will count toward degree requirements at the receiving institution. [Senate Bill 108 \(2010\)](#) requires statewide degree transfer agreements for the transfer of associate degrees from one state institution of higher education to another.

COMPETENCY-BASED EDUCATION

Competency-based learning outcomes emphasize the application and creation of knowledge, along with the development of important skills and dispositions. Competencies include explicit, measurable, transferable learning objectives where the assessment is meaningful, resulting in a positive learning experience for students. Competency-based strategies provide flexibility in the way that credit can be earned or awarded and provide students with personalized learning opportunities like the concurrent enrollment offered as a part of CareerWise's apprenticeship. This is important to CareerWise because of the time students spend at their apprenticeship rather than in the school building.

In May 2013, the Colorado State Board of Education [revised](#) the state's graduation requirements, putting in place competency-based options, which hinge on students' mastery of content rather than seat time. The state created "graduation guidelines," outlining ways in which students can demonstrate mastery in the four major content areas--English language arts, math, social studies and science.

Conclusion

CareerWise is still in its early years, but its operating structure is inclusive and early participation is promising. Other states are paying attention as Colorado continues to coordinate and strengthen connections and partnerships among education, business and workforce development efforts.

NCSL contact: [Sunny Deye](#), 303-856-1469



William T. Pound, Executive Director

7700 East First Place, Denver, Colorado 80230, 303-364-7700 | 444 North Capitol Street, N.W., Suite 515, Washington, D.C. 20001, 202-624-5400

www.ncsl.org

© 2018 by the National Conference of State Legislatures. All rights reserved.