



Accelerating Pathways to Careers

FOR ADULT LEARNERS

AT A GLANCE

The TAACCCT program was developed by the U.S. Department of Labor specifically to improve the ability of the nation's publicly funded community colleges to prepare adults for employment in growing industry sectors. This brief highlights examples of career pathway models funded by TAACCCT that were designed for adult students who require accelerated timelines because they are often under pressure to enter or reenter the workforce quickly to support their families.

PREPARED FOR



EMPLOYMENT AND TRAINING ADMINISTRATION
UNITED STATES DEPARTMENT OF LABOR

BY



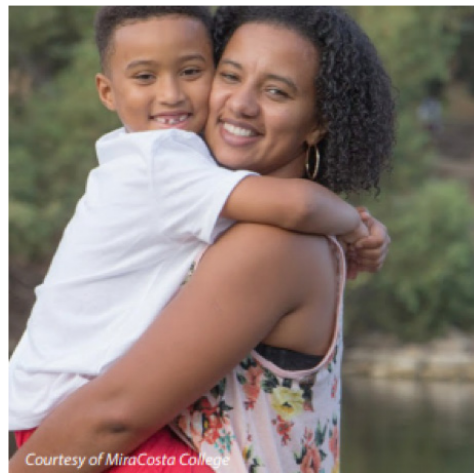
Building a
Future
That Works

Cover Photo

Eugenia Fernandez is a single mother who enrolled in MiraCosta College's Technology Career Institute with the dream of working on navy ships in nearby San Diego. Eugenia faced multiple obstacles during her training and, partway through, she found herself and her young son homeless. But she persevered, successfully completed the program, and found entry-level work as an engineering technician.

As she gained experience, she earned enough money to move into a new apartment with her son. She then achieved her dream job as a navy civilian optics technician and is now working on naval vessels.

Her salary increased by 225 percent after she completed the TAACCCT-funded training.¹ (Adapted from Chaffey College InTech Report.)



Eugenia Fernandez
Photo Courtesy of MiraCosta College

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INTRODUCTION

“Adults are now coming to colleges for a wide variety of reasons, and the field is learning about effective strategies to support adults through the TAACCCT grant program. They are the key to the economy, and community colleges are on the front line in serving these individuals.”²

— Diane Bosak
VICE PRESIDENT OF WORKFORCE STRATEGIES AND POLICY
Achieving the Dream Inc.

In a rapidly changing economy, factors including technology and globalization have created a skills gap between jobseekers and employer needs. Almost 40 percent of U.S. employers report that they cannot find people with the skills they need; at the same time, there are millions of Americans seeking to enter or reenter the workforce.³

The challenge of finding skilled workers is likely to worsen because the workforce is aging. According to the Pew Research Center, 10,000 baby boomers turn 65 every day.⁴ A survey conducted by Deloitte and the Manufacturing Institute found that 67 percent of respondents reported a moderate to severe shortage of available qualified workers. The respondents indicated that the skills gap had reached a “boiling point.”⁵ Thus, to close the skills gap and meet new demands for skilled labor, it is essential to boost the skills of adults who are unemployed or working in entry-level positions.

When adults seek additional training, they often turn to community colleges. Indeed, community colleges have long been at the front lines of educating adult learners; the average age of a community college student is 28.⁶ However, traditional higher education programs and policies—created in an era when the 18-to-22-year-old, dependent, full-time student coming right out of high school was seen as the core market for higher education — are not well designed for the needs of adult learners, most of whom share characteristics such as:

1. Significant familial, financial, and social commitments outside of the classroom.
2. Prior work and life experiences that affect how they learn best.
3. Focused career goals (which may not be true of younger students).
4. Employed at least part time.⁷

In short, these adult students can best be described as “workers who study” rather than “students who work” (see *Figure 1 for some of the specific hurdles and opportunities that adult learners face*).⁸

FIGURE 1

Key Characteristics of Adult Learners in Community Colleges:

Hurdles and Opportunities

- Independent, experienced, self-directed, motivated, and afraid.
- Causes of learning anxiety: fear of failure, fear of being the oldest in the class, fear of appearing “less smart,” lack of confidence, and shame.
- Time is costly because adult learners are juggling many other commitments, such as:
 - Employment
 - Family commitments
 - Social commitments
 - Money
 - Child care
 - Transportation

Adapted from a U.S. Department of Labor presentation titled “Who is the TAA Customer? Resources, Characteristics and Strategies for Adult Learners.”

Download the presentation here:

GET THE PRESENTATION

<https://taaccct.workforcegps.org/resources/2016/04/15/16/28/Who-is-the-TAA-Customer-Resources-Characteristics-and-Strategies-for-TAA-and-other-Adult-Learners>

The Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant Program

The TAACCCT program was developed by the U.S. Department of Labor to improve the ability of the nation's publicly funded community colleges to prepare adults for employment in growing industry sectors. Specifically, programs targeted adults who were eligible for training under the Trade Assistance Act program, as well as a broad range of other adults. The average age of TAACCCT participants across all grant projects was 31, and 37 percent of TAACCCT participants were working when enrolled in TAACCCT programs.⁹

The nearly 60 percent of U.S. community colleges that received TAACCCT grant funding built programs to prepare individuals for high-demand jobs in manufacturing, health care, information technology (IT), energy, transportation, and other industries. All the programs of study lead to an industry-recognized credential, and utilize program models and services that are particularly important for adult students.¹⁰

Community colleges utilized TAACCCT funding to create programs with a strong emphasis on developing career pathways, a sequence of education and training coursework that prepares individuals for different and potentially higher-paying positions within the same occupation or industry.¹¹

TAACCCT provided the “largest federal investment to build an evidence base on effective strategies for serving adult learners.”¹² The grant funds gave community colleges a significant opportunity

RELATED RESOURCE

**Additional and
Forthcoming Research**

The reports of third-party evaluators are available online at www.skillscommons.org

National evaluations will be available on doleta.gov/taaccct

Additionally, researchers at New America Foundation, funded by the Lumina Foundation, are conducting a meta-analysis to see what lessons can be drawn from the TAACCCT grants.¹³

to build their capacity to align programs with industry needs, and deliver them in accessible formats. The programs funded offer lessons about what models and strategies best serve adult learners, which will ultimately help the nation better address the skills gap.

This brief highlights examples of career pathway models funded by TAACCCT that were designed for adult students who require accelerated timelines because they are often under pressure to enter or reenter the workforce quickly to support their families.¹⁴ In each of the cases chosen, the models went on to be scaled up on a state or national level, or were recognized by third parties as potential models for future replication.

This publication utilizes case studies to highlight community college program models and services that are particularly important for adult students, especially the unemployed and incumbent workers looking to upskill or retrain. These were the key criteria that were taken into consideration to decide which examples rose to the top:

1. Clear connection to adult-based learning.
2. Strong outcomes / best practices / results-to-date—this showcases the positive impact of TAACCCT.
3. Sustainability and innovation of program—this reflects the lasting impact of TAACCCT, and how these programs can serve as a positive model to others.
4. Geographical diversity—we sought to choose examples that represent different regions/ demographics of the United States in order to show how TAACCCT impacted consortia across the nation.

The programs fall into the following three main categories for evidence-based strategies that help adult learners reenter school and eventually find jobs:

1. On-ramps to college and support at entry.
2. Program design innovations.
3. Student support and career pathways services to increase retention, completion, job placement, and advancement along a career path.

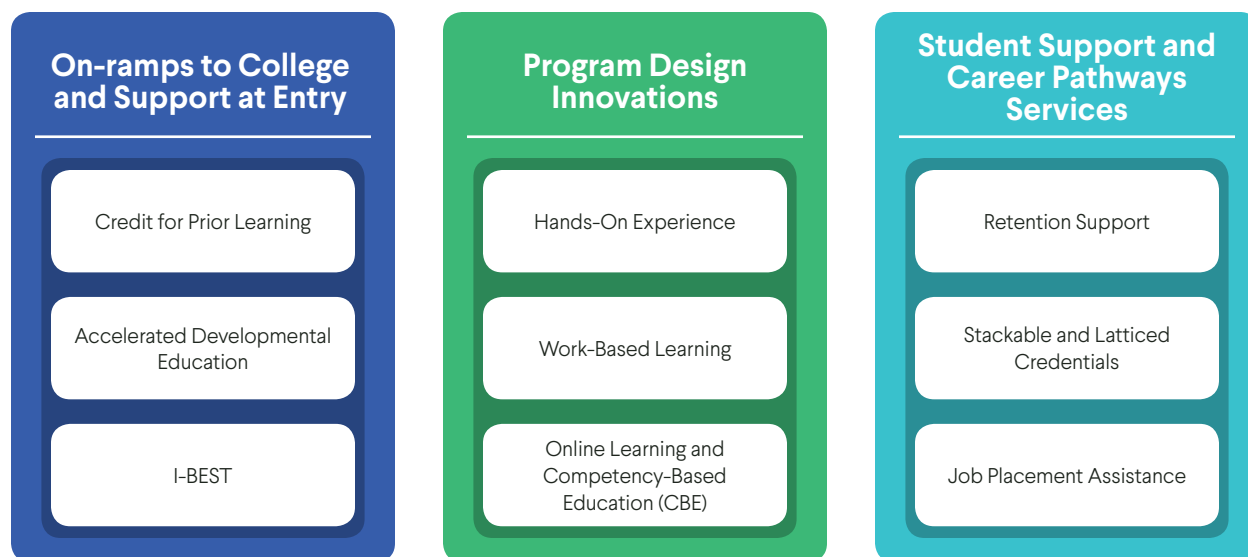
three key “career pathway foci” (pathway entry, integrated training, and career progression) outlined in a recent study led by Dr. Debra D. Bragg that analyzed areas for success in adult learning programs.¹⁵

The framework in Figure 2 below represents the three categories and major strategies within each that have been found to help adult learners reenter school and eventually find jobs, as described in this report. These are among the most common strategies employed by TAACCCT grantees to address the needs of adult learners.

The categories are adapted from the

FIGURE 2:

Framework of Evidence-Based Strategies That Help Adult Learners





The World's Largest Digital Library of Workforce Training Materials for Adult Learners

The TAACCCT grant supported the creation of a digital library called SkillsCommons, which serves as a database of curricula geared for adult learners. SkillsCommons houses curriculum and other program materials produced by TAACCCT grantees. These resources are available for free at any time for reuse by anyone.

Additional resources in SkillsCommons are flagged throughout this publication.

On-Ramps to College and Support at Entry

Adult learners often enroll in community colleges to reskill or upskill as they seek higher-paying jobs, and they therefore hope to see educational programs that directly tie to their employment goals. Programs highlighted in this category focus on changes that occur at the outset of a student's experience in college. The colleges implementing these innovations recognize that adult students come with prior experience and generally have focused career goals and a desire to enter or advance in the workplace quickly.

At the same time, these students may lack the foundational reading and math skills needed to succeed in college programs. According to the Center for the Analysis of Postsecondary Readiness, the majority of students at community colleges take courses in developmental education, also known as remedial education or college-readiness courses.¹⁶ The goal of these courses is to give students foundational skills, such as the ability to effectively use basic English, as well as literacy and numeracy skills. However, less than one-quarter of community college students who enroll in developmental education complete a degree or certificate within eight years of enrollment.¹⁷ In fact, more than half of the community college students who place into developmental education do not make it to graduation.¹⁸

Through TAACCCT, community colleges helped to accelerate the pace at which adult learners were able to enter into college-level coursework relevant to their employment goals, catalyzing change at the state level in Rhode Island, Colorado, Louisiana, and Mississippi, among many others.



Photo courtesy of JFF

“In the past four years, we have seen a boom in prior learning assessment being offered and advertised at two-year colleges across the nation as a direct result of the mission and funding from the TAACCCT grant.”¹⁹

— Donna Younger
ASSOCIATE VICE PRESIDENT FOR HIGHER LEARNING
Council for Adults and Experiential Learning

Credit for Prior Learning:

Giving Credit Where Credit Is Due, Increased Graduation Rates

PROJECT NAME:

ACCELERATED PATHWAYS IN ADVANCED MANUFACTURING

PROJECT LEAD:

COMMUNITY COLLEGE OF RHODE ISLAND

As officials at the Community College of Rhode Island surveyed the needs of local industries, they realized that employers needed workers with skills for *advanced* manufacturing—specifically, in operations involving computer numerical control (CNC), where components are designed via computers rather than manually.²⁰ According to the Rhode Island Department of Labor and Training, employers “need to fill more than 10,000 manufacturing positions between 2010 and 2020.”²¹ To bridge this skills gap, CCRI—one of the largest community colleges in the Northeast, with more than 15,000 students—implemented a project focused on developing pathways for individuals interested in pursuing advanced manufacturing.²² CCRI knew that it was essential for the program to include a way for workers to obtain credit for what they knew already, and to focus on the new skills required in manufacturing operations using new technologies.

With TAACCCT grant support, CCRI implemented a program to offer credit for prior learning (CPL), sometimes also referred to as prior learning assessment. CPL is a process that enables students

SKILLS COMMONS SPOTLIGHT

Resources on Credit for Prior Learning

In addition to CCRI, many other TAACCCT grantees implemented or augmented CPL programs. Here's a look at some of the other initiatives, with links to more information on the SkillsCommons website:

Making the Future:

The Wisconsin Strategy

The consortium's resources on CPL processes and policies:

<https://www.skillscommons.org/handle/taaccct/9694>

A six-minute SkillsCommons video of an interview with Anne Kamps, dean of learning solutions at Northeast Wisconsin Technical College, on the “simple, speedy, and seamless” process of creating a CPL policy:

<http://support.skillscommons.org/showcases/field-guide/pedagogical-innovations/>

MoHealthWINs Missouri Credit for Prior Learning Policy

A guide designed to help Missouri public two-year institutions develop or re-evaluate prior learning assessment practices and policies:

<https://www.skillscommons.org/handle/taaccct/3984>

to be awarded credit that recognizes the knowledge and skills they gained in previous work experiences. To increase access to its CPL process, CCRI used an accelerator tool. Adapted from a web-based prescreening tool developed by the Council for Adult and Experiential Learning (CAEL), the accelerator tool enables students to enter their work information and then be advised as to whether these experiences might translate into credit toward their studies. CCRI then followed up with each student who used the accelerator to offer one-on-one advising.

Once CCRI implemented this system, it witnessed a 140 percent increase in the number of military personnel and veterans served per month.²³ And the graduation rate for students who took advantage of CPL was nearly four times that of those who did not.²⁴ Now the accelerator tool is a part of the application process for all incoming CCRI students, and CAEL has expressed interest in expanding the model to other colleges nationally.²⁵

Accelerated Developmental Education:

Transforming Developmental Education in Colorado

PROJECT NAME:

COLORADO ONLINE ENERGY TRAINING CONSORTIUM (COETC)

PROJECT LEAD:

COMMUNITY COLLEGE OF DENVER

In Colorado, a largely rural state, nearly 60 percent of the students entering community college used to require remediation.²⁶ However, developmental education courses have historically been associated with low course and degree completion rates, a situation true not only in Colorado but across all community colleges.²⁷ In recent years, community college leaders have tackled developmental education reform with growing urgency. Data shows that the longer it takes a student on average to complete a developmental education course, the less likely they are to complete a degree, certificate, or credential program.²⁸

Under Colorado's old system, students could spend up to two years in classes to cover math, reading, and English taught at the high school level. The COETC, a 15-member, statewide community college consortium focused on enhancing energy-related education programs, utilized TAACCCT funding to transform a system

of developmental education, using evidence-based practices in contextualized and accelerated curriculum.²⁹

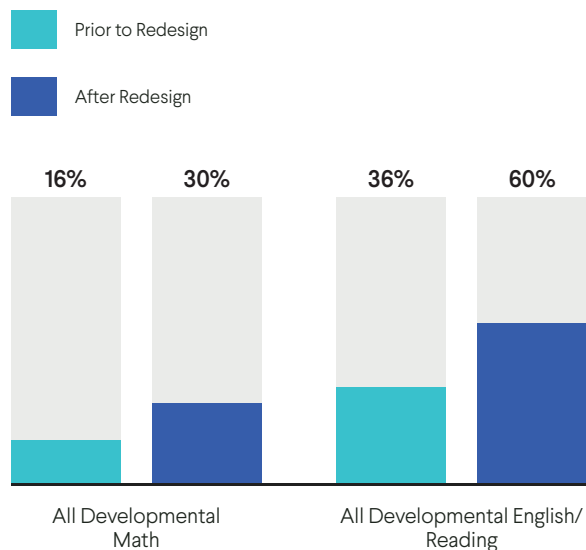
The COETC's goal was to accelerate students' college paths by reducing both the number of courses in the developmental sequence as well as the number of credits students had to earn while ensuring that students would be successful in college-level courses.³⁰ With the revamp, students were enrolled in co-requisite courses, taking college-level math or English alongside support courses. Moreover, due to the COETC's work, the Colorado community college system changed the math requirement to tailor learning more specifically to students' career goals instead of requiring all students to prepare to take college algebra. Under the new math requirement, students are advised to take algebra, statistics, or career-related math courses. Additionally, the redesign incorporated support services that students could turn to for advice on career pathways to ensure that their academic coursework was aligned with their career ambitions.

After the redesign went into effect, Colorado witnessed an increase in the number of students who successfully completed college-level coursework and an increase in the percentage of students who were able to enroll in college-level courses after one term or less.³¹ As Figure 3 shows, after the redesign, the completion rate of college-level coursework almost doubled, from 16 percent to 30 percent, for those enrolled in developmental math. The redesigned developmental education eventually led to a statewide mandate calling for all colleges to redesign developmental education.³²

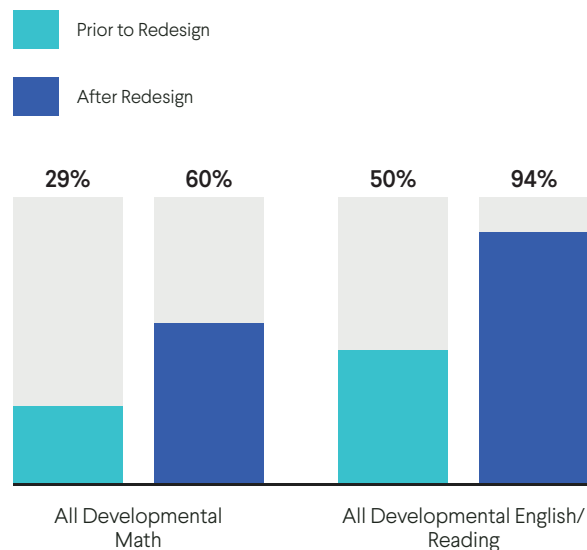
FIGURE 3³³

Colorado Community College System Outcomes

Completion of College-Level Coursework



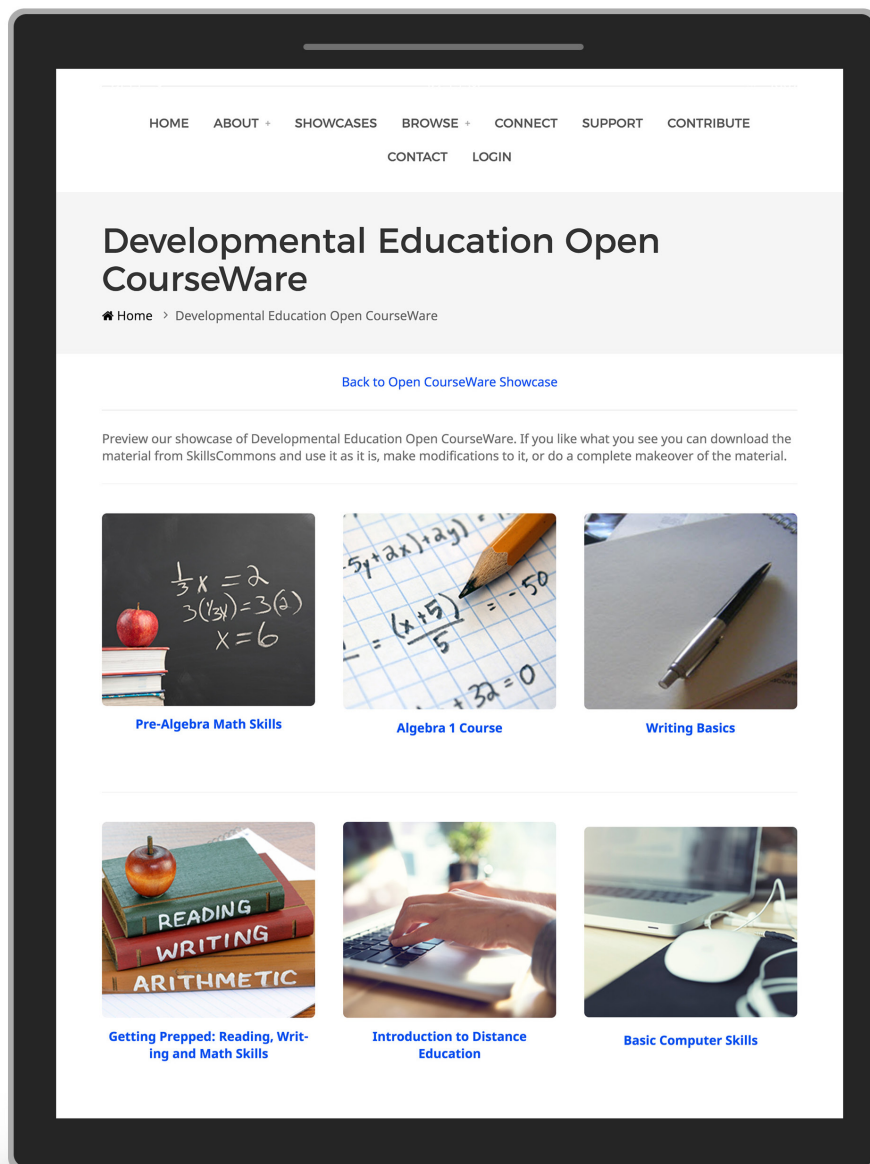
Enrollment in College-Level Coursework in One Term or Less



SKILLS COMMONS SPOTLIGHT

Developmental Education Open Courseware Showcase

<http://support.skillscommons.org/showcases/open-courseware/dev-ed/>



I-BEST: Contextualized Learning:

Scaling up I-BEST across Louisiana and Mississippi

PROJECT NAME:

RETRAINING THE GULF COAST
THROUGH INFORMATION
TECHNOLOGY PATHWAYS

PROJECT LEAD:

BOSSIER PARISH COMMUNITY
COLLEGE

“Prior to the [TAACCCT] grant, Adult Basic Education, workforce, and career and technical departments operated as silos. . . . As the grant progressed, relationships became stronger between these departments.”³⁴

— Gail S. Baldwin

CONSORTIUM OPERATIONAL MANAGER
Bossier Parish Community College, Retraining the Gulf
Coast Workforce Through Information Technology
Pathways Consortium

In Louisiana and Mississippi, the Great Recession led to significant job losses in trade-affected industries such as automobile manufacturing, shipbuilding, and furniture making. College leaders saw that the IT sector was the bright spot, with steady and growing hiring demand. Displaced workers were going back to community colleges to reskill. A consortium of Mississippi and Louisiana

community colleges that came together under a TAACCCT grant created a new core IT curriculum that integrated foundational academic instruction with technical training.³⁵ Looking at where local demand for labor was the strongest, colleges involved in the Retraining the Gulf Coast through Information Technology Pathways initiative chose to focus on specialties such as cybersecurity (computer support, network security), health care IT (medical coding, health care data entry), and industrial technology (air conditioning systems, CNC operations).³⁶

Because Mississippi and Louisiana have a large number of adults with low educational attainment, the consortium colleges developed integrated career pathways using the Integrated Basic Education Skills and Training (I-BEST) model, a nationally recognized evidence-based approach to instruction that supports career pathways.³⁷ I-BEST was designed for adults who lack high school diplomas or GEDs, with the goal of helping students strengthen their basic and technical skills rapidly as they work to earn industry-recognized credentials and access job opportunities. One of the defining features of I-BEST is a team-teaching approach, whereby one instructor teaches foundational math and English while another teaches professional and technical material. This approach enables

adult students to learn while doing. Two-thirds of Gulf Coast IT pathway program participants in noncredit programs earned certifications, and roughly one-third earned more than one certification.³⁸

Encouraged by the positive outcomes on credit hour accumulation and credential attainment for adult participants in the IT pathways program, both Louisiana and Mississippi have incorporated lessons learned from the TAACCCT-funded initiative into their educational programming.³⁹ Specifically, in Mississippi, the five colleges within the state that participated in Gulf Coast IT pathways became models for the Mississippi Integrated Basic Education and Skills Training Program (MI-BEST), which was launched with grant support from the Kellogg Foundation to expand the I-BEST model to all 15 community colleges across the state.⁴⁰ MI-BEST has expanded beyond IT to other disciplines, such as welding and culinary arts.⁴¹



LaXavier Dunn

LaXavier Dunn (above), preparing for his time in Coahoma Community College's MI-BEST program, which grew out of the TAACCCT-funded Retraining the Gulf Coast through Information Technology Pathways initiative. Dunn was unemployed without a high school diploma. After participating in the MI-BEST program for a year, he had earned a GED, was employed as a welder, and was working toward an associate's degree. (Picture and information from Coahoma Community College.)⁴²



For additional materials from the Retraining the Gulf through IT Pathways Consortium project, visit SkillsCommons: <https://www.skillscommons.org/handle/taaccct/519>



Program Design Innovations: Introducing Active and Online Learning

Adult learners benefit from methods that tap their work and life experiences, and from learning that mirrors typical activities in work settings, such as team projects, group discussions, and exercises in which participants practice their skills. A major contribution of TAACCCT, as highlighted in the case studies below, was the focus on active educational experiences to enable adult learners to connect their learning to relevant work skills, and to tailor their learning experiences to support their career goals.

Notably, TAACCCT support expanded and updated educational technologies in community colleges. TAACCCT grants helped fund the purchases, training, and implementation work involved in starting or furthering online learning, hybrid models, and IT-competency-based models. Incorporating technology into program design is important for adult learners for two reasons: it offers flexibility that enables adults to study at a customized pace as they juggle classes and work and family responsibilities, and it builds the technological skills required in a rapidly digitizing world.

And with employment as the end goal for most adult learners, TAACCCT programs were industry-aligned with significant engagement of local employers early on in program development to better meet their workforce needs.

Hands-On Experience: Hands-On Cybersecurity Experience Leads to Jobs

PROJECT NAME:
CYBER TECHNOLOGY PATHWAYS
ACROSS MARYLAND

PROJECT LEAD:
MONTGOMERY COLLEGE

When Montgomery College began its Cyber Technology Pathways Across Maryland project, the state of Maryland had many displaced workers, a result of job losses due to technological innovation or outsourcing to other parts of the world, according to Sanjay Rai, senior vice president for academic services at Montgomery College. But despite the high number of people in need of work, there are 20,000 unfilled cybersecurity jobs in Maryland alone, because employers cannot find workers with the skills to fill the positions.⁴³ Maryland is a national center of cybersecurity, with more than 130,000 IT jobs—49 percent above the national average.⁴⁴ Montgomery College saw an opportunity to retrain workers for this growing field.

According to Rai, one of the major challenges facing the IT industry is the breakneck speed at which the field of

cybersecurity evolves. Rai says that CEOs have told him that they sometimes do not even know about products that they will need to create and ship the next month. In a fast-paced industry, hands-on learning is particularly important to help adults quickly reskill.

A \$14.9 million TAACCCT grant supported the development of six state-of-the-art cybersecurity labs and the creation of an accelerated six-month training program. The cybersecurity labs have standalone networking, enabling students to engage in real-world security exercises without affecting college operations.⁴⁵ These laboratories allow students to receive hands-on training on state-of-the-art technology, which prepares them for employment at companies such as Hughes Networking Systems.⁴⁶ Hands-on learning enables adult students to directly apply what they are learning in the classroom to relevant employment, increasing their competitiveness in the labor market. To date, over 3,887 students have been trained for cybersecurity jobs in Maryland's IT industry, hired by over 250 employers, including Booz Allen Hamilton and Lockheed Martin, which are partnering with the colleges.⁴⁷



For additional materials from the Cyber-Technology Pathways Across Maryland project, visit SkillsCommons: <https://www.skillscommons.org/handle/taaccct/1418>

Work-Based Learning:

Learn, Earn, Work: Closing the Skills Gap in Minnesota

PROJECT NAME:

MINNESOTA ADVANCED
MANUFACTURING PARTNERSHIP
PROJECT

PROJECT LEAD:

SOUTH CENTRAL COMMUNITY
COLLEGE

“After only two years, I had plenty of options, I was hired right away, and the work was even better than I imagined. . . . Today, my career ladder only seems to have one direction: up.”⁴⁸

— Minnesota Advanced Manufacturing Partnership Project Participant

Nearly half of Minnesota’s Fortune 500 companies have manufacturing operations, including 3M, Medtronic, General Mills, Land O’Lakes, Hormel Foods, and Ecolab.⁴⁹ Funded by a TAACCCT grant, the Minnesota Advanced Manufacturing Partnership Project (MnAMP) launched the Learn, Work, Earn initiative, an effort to meet the urgent need for skilled workers in manufacturing that led 12 community colleges and representatives from industry, state government, and manufacturing associations to form MnAMP. The project

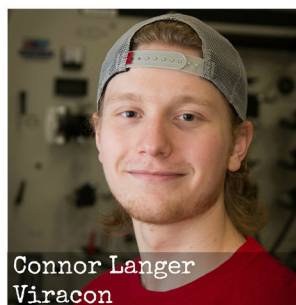
standardized manufacturing-based curriculum at partner organizations and provided work-based learning opportunities. It enabled workers eligible for Trade Adjustment Assistance, veterans, and other adult learners to gain the skills needed to work in advanced manufacturing operations tied to the fields of mechatronics, machining, and welding.

Work-based learning programs—where classroom learning is paired with activities that occur at the workplace—are designed to train and place adults into well-paying jobs while also helping to develop a skilled workforce to ensure that U.S. companies remain competitive in the global marketplace. Work-based learning encompasses a range of activities that occur in the workplace, such as job shadowing, internships, and apprenticeships.

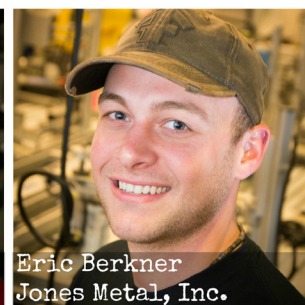
Working closely with industry, MnAMP offered programs that combined classroom time with time spent learning on the job, including Registered Apprenticeships. Under the restructured academic framework, students attended class three days a week and worked two days a week. That schedule enabled them to work toward academic credentials while engaging in work-based training. The apprenticeships were paired with training offered via an online virtual classroom

platform called +Connect. The +Connect training featured eight-week courses led by live instructors who participated via telepresence. With +Connect, employees can take classes at their employers' facilities, making it an ideal system for incumbent workers and people in apprenticeships.⁵⁰

MnAMP's Registered Apprenticeship program had over 100 Registered Apprenticeships and 44 percent of MnAMP's incumbent workers received wage increases.⁵¹ To see additional materials from MnAMP, please view the SkillsCommons Work-Based Learning and Apprenticeships Showcase.



Connor Langer
Viracon



Eric Berkner
Jones Metal, Inc.



Jordan Schoener
Dotson Iron Castings



Rob Stevens
Amesbury Truth

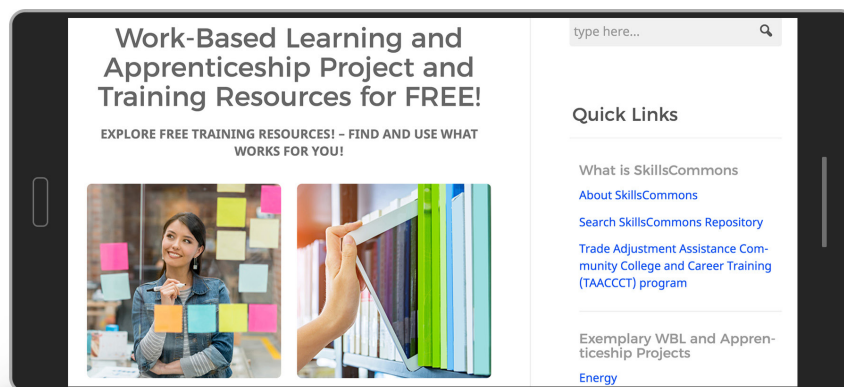
Advanced Manufacturing Dual-Training-and-Apprenticeship students

Four Advanced Manufacturing Dual-Training-and-Apprenticeship students who graduated from Minnesota's South Central College in 2018. The students leveraged their classroom learning to advance their career pathways at partner employers under the MnAMP grant.⁵²

SKILLS COMMONS SPOTLIGHT

Work-Based Learning and Apprenticeships Project and Training Resources

<http://support.skillscommons.org/showcases/apprenticeships/>



Online Learning and Competency-Based Education (CBE):

Accelerated Learning for Adult Learners with Competency-Based IT Instruction

PROJECT NAME:
THE FLEXPACE PROGRAM

PROJECT LEAD:
SINCLAIR COMMUNITY COLLEGE

“We’ve been recognized by the Ohio Department of Higher Education as the best-practice model for CBE in the state. . . . We also presented or provided technical assistance to more than 60 schools and organizations nationwide in 2017. So that seed that was planted with the TAACCCT grant has not only helped us grow, but we’ve been able to use that to help other institutions as well.”⁵³

—Christina Amato
CBE PROGRAM MANAGER
Sinclair Community College

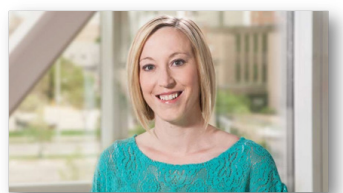
Ohio has more than a million adult learners with some college but no degree, and the state has set ambitious attainment goals for 2025—but it is unlikely to be

able to meet those goals with a “business as usual” approach, says Christina Amato, CBE program manager at Sinclair Community College in Dayton.⁵⁴

While traditional community college programming focuses on time spent in the classroom, CBE shifts the emphasis to the actual competencies achieved, enabling students to proceed at their own pace. CBE focuses instructional delivery and assessment on how well students have mastered what they have been taught based on their demonstration of the knowledge, attitudes, values, skills, and behaviors required for the degrees they seek.⁵⁵

At Sinclair Community College, 70 percent of the CBE students are adult learners, many of whom are military personnel, veterans, or working adults.⁵⁶ These students often have significant prior work experience and are juggling multiple responsibilities, so flexibility is key. The CBE format enables students to start and finish online classes at any time during Sinclair’s 16-week semesters.⁵⁷ Participants with access to these fully online, flexibly paced CBE courses and the most enhanced academic coaching achieved higher program and credential completion rates than students in traditional programs.⁵⁸ The program has educated over 1,300 students who have earned more than

650 certificates and degrees, and enrollment has significantly increased.⁵⁹ Compared with traditional students, Sinclair's CBE students have a 30 percent faster course completion rate and double the graduation rate.⁶⁰ Students interviewed repeatedly emphasized the appeal of the CBE program's flexibility, which allowed them to balance college with work and family obligations in a way that traditional programs—even traditional online programs—did not.⁶¹



Student Profile:

Jenny

“Jennifer came to us. She was an army veteran who had served during the Iraq war as a network engineer but, during that time, her seven years in the military, she never earned a credential. Subsequently, when she separated and came home to the Dayton area, she was unable to find any employment in the IT field. When she came to us, she was working full time in the restaurant industry and had a young family at home.

“She had interacted with Sinclair several times but never enrolled because the traditional programs really just didn't suit the kind of pressure she had in her life.

“Through our CBE program, she was able to apply a lot of her prior knowledge, and she interned and was directly hired in the spring of 2016, and later moved on to the university in our area.”⁶²

— Christina Amato,
CBE PROGRAM MANAGER
Sinclair Community College



For additional materials from the Accelerated Learning for Adult Learners with Competency-Based IT Instruction project, visit SkillsCommons: <https://www.skillscommons.org/handle/taaccct/409>

Student Support and Career Pathways Services: Industry-Aligned Track to Employment

Community colleges that serve largely adult populations need to understand that for students 25 and older, “education is not the center of their lives,” says Pam Eddinger, president of Bunker Hill Community College in Boston.⁶³ Their jobs and their families are more important to them. “We are only part of their lives . . . yet they all know that what’s going to move them forward is education,” she adds. “They have the expectation that after they graduate their incomes will rise and their lives will be transformed.”⁶⁴

Adults have lower postsecondary persistence and completion rates than traditional students.⁶⁵ Thus, services to help adult students stay on track are critically important. Research suggests that proactive advising and support, sometimes referred to as “intrusive advising,” makes a significant difference to community college students, helping them identify and set career and academic goals, as well as develop strategies to reach those goals.⁶⁶ TAACCCT-funded programs introduced a wide range of support services, from intake to completion and on to employment and advancement.

TAACCCT also supported the development and redesign of career pathways. Career pathways, as implemented at a community college, are programs of study developed in response to the hiring needs of local employers. In addition to work-based learning opportunities, career pathways include stacked and latticed credentials that allow students to advance to higher levels along a career ladder, industry-recognized credentials, and career guidance.⁶⁷

According to a recent study, career pathway participants were more likely to attain higher wages and annual earnings than members of a control/comparison group.⁶⁸ Career pathway participants were also more likely than members of the control group to complete training-related credentials and to be employed and retained in jobs related to the training they received.⁶⁹

Student Support Services from Intake to Completion: Bringing Job Development and Career Coaches to Campus

PROJECT NAME:

NEW MEXICO SKILL UP NETWORK:
PATHWAY ACCELERATION IN
TECHNOLOGY AND HEALTHCARE
(SUN PATH)

PROJECT LEAD:

SANTA FE COLLEGE

Using TAACCCT grant funds, New Mexico's SUN PATH consortium partnered with the New Mexico Department of Workforce Solutions to hire, train, and supervise job development career coaches (JDCC) for each college in the consortium. The JDCCs are officially employees of the New Mexico Department of Workforce Solutions and they act as liaisons connecting the community colleges, state Workforce Connection offices, regional employers, and students. Each college provides its campus JDCC with office space, a phone, and a computer, and the JDCC becomes a part of the SUN PATH team at each site. The JDCCs lead workshops on topics such as résumé development, provide professionalism training, and conduct mock interviews. They also organize job fairs, assist with job placement, and connect with employer partners. To make sure students are anticipating graduation and are actively

preparing for employment, the JDCCs use a timetable with benchmarks at 90, 60, and 30 days before graduation.

At the time the TAACCCT proposal was submitted, SUN PATH had 30 employer partners written into the grant. Its employer base has since grown to more than 240.⁷⁰ According to a return on investment analysis conducted on SUN PATH by the University of New Mexico, the estimated increased future earnings for the 1,609 certificate holders employed in New Mexico's health care sector from 2017 through 2028 is \$132 million.⁷¹ Because of the success of the program, the secretary of the New Mexico Department of Workforce Solutions has agreed to realign resources to make it possible to keep the majority of the JDCCs on the college campuses after the TAACCCT grant expires.⁷²



For more information on the SUN PATH project, visit SkillsCommons:
<http://support.skillscommons.org/showcases/field-guide/student-support/>

Stackable and Latticed Credentials:

Stackable and Latticed Credentials for Advanced Manufacturing Career Pathways

PROJECT NAME:

MAKING THE FUTURE: THE WISCONSIN STRATEGY

PROJECT LEAD:

NORTHEAST WISCONSIN TECHNICAL COLLEGE

Wisconsin's Making the Future grant brought together a consortium of 16 technical colleges along with employers and workforce development groups to redesign and expand the use of stacked and latticed pathway programs in advanced manufacturing.⁷³

Stacked and latticed pathways are a package of credit-based courses and competencies that connect and build on each other within a program of study, yielding a series of credentials for students. Stackable and latticed pathways are a workforce strategy to help people get into jobs quickly, as well as continue on career pathways. "Stackable" refers to a linear relationship, with each credential building on previously learned content. "Latticing," as the name implies, allows for side-to-side credentialing. As students progress through a degree plan, earning certificates along the way, they may get to a point where they want to add or shift to another related field of study.⁷⁴ The advantage of stackable and latticed pathways is the flexibility and career and economic mobility that they offer students. Moreover, the pathways lead to credentials that have value in education (because they are aligned with college requirements) and the labor market (because they signal mastery of skills to employers).

The consortium colleges created new manufacturing pathways and modified existing ones to enable participants to earn

"Stackable and latticed pathways are a workforce strategy to help people get into jobs quickly, as well as continue on career pathways."

short-term credentials (which could be completed in less than one year) that stack toward one- and two-year technical diplomas and, in some instances, associate's degrees.⁷⁵

The average age of the grant participants in the stacked and latticed manufacturing pathways was 27, and roughly two-thirds of those students had received no higher degree than a high school diploma.⁷⁶ Demonstrating strong

employer engagement, almost half of the colleges expanded their relationships with employers in a quest to offer more work-based learning experiences and incorporate industry skill standards and competencies into the manufacturing program curriculum. Participants in stacked and latticed manufacturing pathways had a statistically significant higher rate of credential attainment: 48 percent, compared to 30 percent for the matching comparison group.⁷⁷



For additional materials from the Accelerated Learning for Adult Learners with Competency-Based IT Instruction project, visit SkillsCommons: <https://www.skillscommons.org/handle/taaccct/409>



Photo courtesy of JFF

Student Support Services for Job Placement: Dedicated Job Placement Center and Services

PROJECT NAME:

INLAND EMPIRE REGIONAL TRAINING CONSORTIUM

PROJECT LEAD:

CHAFFEY COLLEGE

“We don’t just offer jobs to our program trainees, but long-term career paths that provide a living wage and better quality of life.”⁷⁸

— Sandra Sisco

DIRECTOR OF ECONOMIC DEVELOPMENT
AND THE INTECH CENTER

Led by Chaffey College in Rancho Cucamonga, California, the Inland Empire Regional Training Consortium—made up of nine community colleges, two universities, local employers, and workforce boards—was awarded a TAACCCT grant in 2014. The award spawned a public-private partnership between California Steel Industries and Chaffey College. TAACCCT funds were used to renovate a 33,000-square-foot building located on CSI property, and then open a training center called the Industrial Technical Learning Center (InTech) in the newly refurbished facility. InTech provides classroom and hands-on instruction in entry-level coursework and training for certifications that can lead to career opportunities in the fields of building operations, construction, energy and utilities, facilities, HVAC, manufacturing, supply chain, and distribution.⁷⁹

Notably, InTech’s programs focus on helping students achieve the ultimate goal of job placement. Accordingly, each program begins with a course called Tools for Success in which students receive training in soft skills, résumé building, communication skills, and basic employability skills.⁸⁰ InTech has a number of employer

partners and offers paid internships for trainees at no cost to the employers.⁸¹ In addition to CSI, InTech's employer partners include a top exporter in Southern California, the California Manufacturers Technology Association, the San Bernardino County government, the Riverside County Workforce Development Board, and companies such as JP Morgan Chase and Ventura Foods.⁸²

InTech offers students strong job placement support services that have shown impressive results. Since it opened in February 2016, InTech has served more than 1,200 students and it has a 77 percent placement rate.⁸³ Applying a conservative 2 percent cost-of-living adjustment to the annual salaries of generally skilled laborers and individuals employed in the five TAACCCT focus areas, InTech estimates that prospective TAACCCT-trained employees stand to earn approximately \$393,096 more than their generally skilled laborer counterparts over the course of an average 25-year work life.⁸⁴



For additional materials from the Inland Empire Regional Training Consortium project, visit SkillsCommons: <https://www.skillscommons.org/handle/taaccct/4076>



CONCLUSION

“College leaders and faculty often cite TAACCCT as a catalyst for transforming how their institutions serve adults with no postsecondary credential.”⁸⁵

— New America Foundation

Community colleges across the nation are seeking ways to help adult learners, who often see themselves as primarily “workers who study” rather than “students who work.” Today’s adults need higher levels of academic and technical knowledge to remain employable in an information and service economy characterized by frequent job and career changes.⁸⁶

Across the country, TAACCCT provided grant funding to help community colleges meet the needs of adult learners facing this new reality. The improvements in the strategies detailed in this brief show how strategic changes, funded by TAACCCT, helped equip schools to better address the specific needs of nontraditional students through career pathways, credit for prior learning, competency-based models, online training, and strong student support systems. As a result, community college leaders have said that colleges across the country are now in a better position to serve adult learners, and local communities and economies will reap the dividends in years to come.

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