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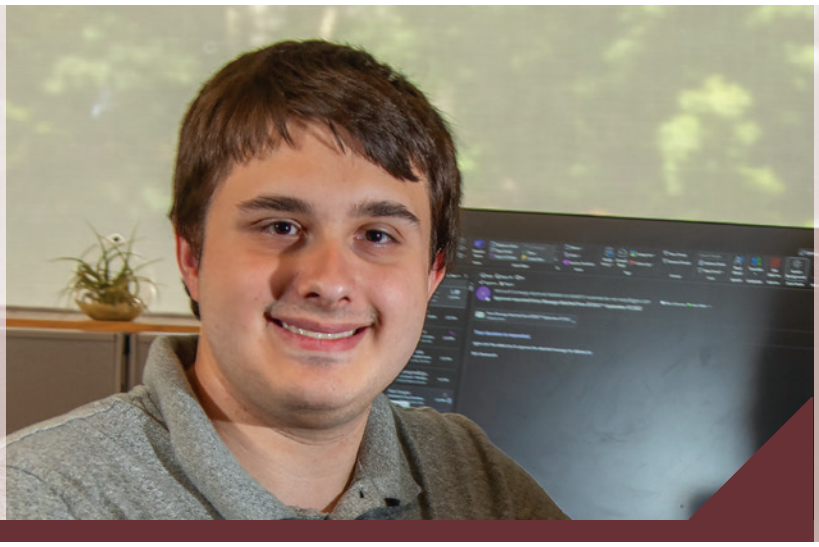
Short and sweet

Short-term programs—when done right—boost careers and enrich lives

INSIDE



On the cover: Catiana "Cat" Beaver, a 22-year-old student at Victor Valley College in California, works with instructor Troy Kuhns at an oxyacetylene station, inspecting a weld. A proven rebel when it comes to desk jobs, Beaver found her path thanks to a state-funded effort that boosts participation in programs that lead to construction careers. "I fell head over heels in love with welding," she says.

Editor's note: The stories in this issue of Focus were reported and written by Susan Headden, a Pulitzer Prize-winning journalist and communications professional with many years of experience covering education issues. Headden, a former staff writer at The Indianapolis Star, also worked nearly 16 years at U.S. News & World Report, ultimately serving as a managing editor. She later held senior positions at the Carnegie Foundation for the Advancement of Teaching and the Bill & Melinda Gates Foundation. She now works as an independent communications consultant based in Washington, D.C.

PRESIDENT'S MESSAGE

If adversity is a great teacher, the COVID-19 pandemic is certainly one of the biggest learning opportunities in decades. Among other lessons, it taught us the "essential" nature of the workers we often ignore or take for granted—not just nurses and other health care professionals, but delivery drivers and IT workers, garbage collectors and grocery clerks.

It reminded us, sometimes with blunt-force cruelty, that life is fragile and that we must hold loved ones dear. It taught us new ways to connect—and, yes, new ways to spend our alone time.

Perhaps most obviously, it taught us the importance of flexibility. In times of crisis and uncertainty, there may be no greater strength than one's ability to adapt, to respond quickly—but wisely—to changing circumstances.

And the pandemic certainly changed the nation's economic circumstances, in profound ways. Just a few concrete examples:

- It caused substantial short-term job loss and led to a large-scale redefinition of jobs that is likely to last for years. This creates a huge need for displaced workers to retrain as quickly as possible.
- It highlighted a disturbing dearth of qualified job applicants in many areas, including health care, child care, K-12 education, supply chain management, logistics, warehousing, and information technology.
- It supercharged the work-at-home movement, convincing more and more employers that productivity doesn't require fully staffed offices.
- It helped push the federal government to finally fund a national infrastructure program, which promises to create millions of jobs in construction and related fields.
- It contributed substantially to what many experts see as a coming recession, making the rising cost of a traditional college education less and less attractive to many Americans.

All of these developments—good and bad—have turned our focus to one solution that, until recently, got far less attention that it deserves: short-term education and training programs. Such programs, including apprenticeships and licensure programs, lead to industry-recognized certificates and certifications—high-quality, workforce-relevant credentials that can boost careers and change lives.

According to the Center on Education and the Workforce at Georgetown University, 60 percent of the 15 million jobs expected to be created by the recently enacted federal infrastructure law will require no more than six months of training.

Other recent research underscores the value of short-term credentials, showing that such credentials bring major benefits to those who earn them, including a greater likelihood of employment (72 percent vs. 64 percent). And individuals who earn credentials taking between one and two years to complete can expect to increase their earnings by as much as 22 percent.

These facts, along with a wealth of other recent economic data, confirm another lesson from the pandemic: that short-term credential programs—when done right—are a vibrant and vital tool for long-term prosperity.

This issue of Focus magazine is designed to drive home that lesson by shining the spotlight on just a few of these promising programs. As always, Focus offers substantive slices of real life: stories from around the country that reflect the reality of today's students. For instance, in this issue:

- You'll meet Jake Taber of Traverse City, Mich., a young man whose affinity for video games—coupled with an early, relentless pursuit of IT credentials—is helping him forge a promising career in information technology. Along with the many industry-recognized certifications he's already earned at age 21, Taber also has an associate degree, thanks to a program in which Michigan community colleges award academic credit for industry credentials.
- You'll also get to know Jack Camp, a 40-year-old truck driver from Peoria, Ill., who left his troubled youth behind—and literally found a new road—because of the Illinois Workforce Equity Initiative. Camp, who grew up in poverty as the son of drug-addicted parents and was incarcerated himself for more than a decade, is now a focused and valued employee of a local delivery firm. The state-funded workforce program gave Camp a huge boost, allowing him to earn his commercial driver's license in just six weeks—at no cost.
- Finally, you'll meet Catiana "Cat" Beaver of Victorville, Calif., a torch-wielding 22-year-old who, with a little help from the state, has bonded fully with her career choice: welding. Beaver, who dropped out of community college because she felt she was "being pushed into a desk job," now attends a short-term pre-apprenticeship program at Victor Valley College. She's being aided by a grant from the California High Road Construction Careers program, a state-funded effort to direct more residents into construction jobs.

In addition to the stories and photos in this printed version of Focus, there's much more on our website, www.luminafoundation.org. There, Focus offers several extra features, including compelling videos of students and links to related material.

Whether in print or online, all of the material in this issue has one purpose: to emphasize the value of short-term credential programs—for tens of thousands of individual Americans, and for the nation as a whole.

Frankly, it's a bit of a mystery that their true value hasn't already been fully recognized and realized. Fortunately, that's changing, perhaps because every day—certainly every economic crisis—brings more evidence that these programs create promising pathways to a better future.

Jamie P. Merisotis
President and CEO
Lumina Foundation

Short-term programs bring long-lasting benefits–

Shortcomings associated with short-term credentialing programs have for years been neglected. Too often these programs have led to low-wage jobs, including some that workers could have found with no credential at all. People who are Black and brown were routinely tracked into career and technical programs rather than directed toward programs leading to college degrees. Many programs weren't designed with students' needs in mind, and schools sometimes designed them with little attention to labor market demands.

Now however, educators, lawmakers and policymakers are changing their thinking about short-term credential programs. They're improving curricula, raising standards, and backing the programs with substantial public investments.

To some extent, the pandemic pushed this shift to the forefront: Suddenly laid off, workers who needed new skills didn't have two years, let alone four, to pursue costly college degrees. What they did (and do) need are industry-recognized certificates that quickly qualify them for in-demand jobs. Many students also need help paying for these programs.

As with other developments borne of the pandemic—outdoor dining, home offices, curbside delivery—what started as an emergency measure has become an effort to build on. Employers, educators, and policymakers now see short-term credentialing programs not as a temporary fix, but as a durable tool to boost educational attainment, employment, and economic growth.

The best programs prepare students immediately for desirable jobs, well-paying apprenticeships, or further education.

About one in five American adults now has a short-term credential. And those wanting to pursue credentials have more than 300,000 programs to choose from, in fields as varied as construction, computer technology, and fashion design. It's a rich menu, but the sheer number of programs can be overwhelming, especially to students (particularly low-income students) who are unaware of their options or unsure what career to pursue.

At the same time, the quality of non-degree programs has been all over the map. The best programs prepare students immediately for desirable jobs, well-paying apprenticeships, or further education. They also build on each other. But other programs lack the content and instruction that assure students of any of these outcomes. Some for-profit programs even have left students with worthless credentials and mountains of debt.

To fulfill their promise, experts say, short-term credential programs must be held to a high standard of quality—one that should be clearly and universally defined.

According to the National Skills Coalition, an organization that helps states shape policies for workforce development, a "quality credential" program is one that provides students with sound career counseling, job-related knowledge and skills, and equal access and opportunity. It makes sure that those who complete the program can demonstrate the competencies needed for available jobs. (Notably, doing so needn't require a minimum of credit hours or "seat time.") Crucially, the program must show evidence of employment and solid earnings.

The best programs focus on ***students***. That may seem obvious, but in the past, too many programs have been designed to serve the needs and schedules of schools and employers. This has pushed many students into job tracks that lead to poor career matches. Quality programs, by contrast, give students the information they need to make highly informed decisions about their futures.

Successful programs also commit to equity. States, employers, and educational institutions know that they cannot achieve their attainment goals or widen their talent pools without creating more credentialing opportunities for people of color, low-income individuals, and other populations that postsecondary systems have served poorly for too long.

Finally, the most valuable credentials are stackable. That is, they connect and build on themselves in a way that encourages further education and leads to promotions and higher pay. Following this sort of pathway, a certified nurse's aide, for instance, can build on his or her CNA certificate to earn another as a licensed practical nurse, and ultimately a college degree as a registered nurse. Although the practice has not yet been widely adopted, more institutions are awarding college credit for credentials and for work experience, designing postsecondary pathways that are carefully aligned.

When states have clear quality standards for credential programs, notes the National Skills Coalition, everyone wins. Students once daunted and confused by thousands of program offerings now

–when designed with students in mind

have the information they need to narrow their search and find the programs that work best for them.

As to employers, clearly defined credentials help them quickly identify talent and tailor their programs to meet changing economic needs. A quality definition also provides guidance to providers, such as community and technical colleges, as they work with employers to shape curricula. And for state, local, and federal policymakers, a quality definition helps them set targets for attainment and create budgets to ensure that all students are served equitably.

Several states are now dedicating funds and leveraging federal dollars to create short-term credential programs, improve and expand existing ones, and ensure student success, particularly among underserved populations.

Virginia's Fast Forward program, for instance, provides $13.5 million annually for more than 124 short-term, noncredit courses at the state's community colleges. The program, launched in 2015, focuses on training workers for industries that are particularly hungry for them.

Under the state's "pay for performance" model, qualifying students pay one-third of the tuition upon enrollment. The state picks up another third when the student completes the program and the final one-third when the student obtains a certification or a license. Students who don't complete must pay the final third. But Fast Forward coaches work with students to make sure they ***do*** complete, helping them identify pathways and navigate finances and logistics.

Outcomes so far are promising: Over 90 percent complete their credential programs, and those who do are earning 25 to 50 percent more than they did before enrolling.

In Florida, a state heavily reliant on the hospitality business, the pandemic hit hard. Well over half of Floridians (58 percent) lost their jobs or suffered pay cuts or reduced hours because of COVID-19, and those who lacked a post-high school credential felt the losses most acutely. To help meet the need for more education and training, the legislature allocated $35 million to fund opportunities for short-term career and technical programs in high-demand industries.

The grants cover up to two-thirds of a program's cost, including tuition, fees, and exams. The legislation, which emphasizes instruction in basic skills in a career context, specifies that one-fourth of the funds go to rural institutions. The state also is insisting its dollars be well spent: Florida institutions must refund the cost of tuition to students who fail to find a job within six months of completion.

Louisiana, for its part, has already taken a big step to boost educational attainment by allowing qualified 18-year-old high school graduates to attend four-year state colleges for free. But after age 20, that opportunity ends. Now, however, Louisiana residents 21 and older can take advantage of a program that provides state funding for those seeking two-year and short-term credentials that are stackable, transferable, and create clear pathways to careers and higher degrees.

Overall, short-term credential programs remain a small share of the higher education market, accounting for only 10 percent of higher education enrollment in 2018, the most recent year for which statistics were available. And four-year degrees remain the ticket to the highest-paying careers. Yet workforce and demographic trends have demonstrated the value of alternatives. From 2010 to 2018, the number of postsecondary certificates awarded by public colleges increased by 30 percent. And, as seen in these states and several others, policymakers are increasingly committed to supporting them.

From 2010 to 2018, the number of postsecondary certificates awarded by public colleges increased by 30 percent.

Meanwhile, advocates are pushing for the federal government to support quality credential programs in the same ways they support traditional colleges. In particular, they want short-term programs to be eligible for federal Pell grants, which now only cover degree programs of at least 16 weeks. Advocates have also urged that Pell be funded at double the current amount.

Virtually every state in the country has set a specific target for educating its residents beyond high school—acknowledging that in just a few years, two-thirds of all jobs will require a postsecondary credential. But policymakers increasingly realize that they can't reach their goals by relying exclusively on traditional two- and four-year programs.

The importance of short-term credentials is becoming clear. "The concept has really bubbled up," said Camille Conaway of the Louisiana Community and Technical College System. "People are seeing the essential skills being gained, and it has really opened their eyes. It's proof that with just a little help, with clear pathways, it's a game changer for many people."

Michigan programs give (college) credit—and assistance—where it's due

Jake Taber is a young man in a hurry. At 21, the Traverse City, Mich., resident has already built an impressive resumé as an IT professional, earning an associate degree and several industry-recognized certifications along the way.

An avid video gamer since his middle school years, Taber always knew that his future would be wired. And thanks to an innovative program offered by Michigan's community colleges, that future is arriving even faster than he planned.

Jake Taber (left) enjoys a lighthearted moment with his supervisor, Marc Johnson, as they troubleshoot an employee's laptop at RJG Inc., an injection molding company in Traverse City, Mich. Taber, 21, is a recent hire, having earned several information technology credentials via short-term programs.

The program doesn't just improve Taber's immediate career prospects in information technology. Because it gave him traditional college credit for the certificates he earned, he now has a head start on further education if he someday chooses to pursue it.

One criticism of certificate programs in general—even though they have value and lead directly to jobs—is that too few translate into college credits. For many certificate students, perhaps even most of them, that doesn't matter. But Michigan's community colleges wanted to give students options—and incentives to continue their education. So several colleges changed longstanding practice by awarding academic credits for industry-recognized credentials, creating a clear pathway to an associate or bachelor's degree.

"It's critically important that credit be embedded in the student experience," said Erica Orians, executive director of the Michigan Center for Student Success at the Michigan Community College Association. "There are many ways to get trained, and we want to honor all of them."

For instance, if a student took a course resulting in a Cisco Systems cybersecurity credential (a popular program), he or she could get credit for the entire college-level Cisco Certified Network Associate (CCNA). "You would get credit for Computer Information Systems 101, an associate-level course that prepares students for a credential," Orians said. "Maybe you could get three certifications or an industry-recognized credential."

Serving students in this way means making big changes in requirements, and sometimes curriculum, which can create more work for faculty and registrars and other administrators. But colleges across the state are taking lessons from credit-awarding programs already in place at Northwestern Michigan College, Grand Rapids Community College, and Macomb Community College.

Northwestern Michigan College (NMC) is a two-year institution in Traverse City that serves as a transfer launch pad for most of its students, said Jason Slade, the college's vice president for strategic initiatives. "We are trying to embed credits more and more in our programs, especially those that lead directly to the workforce," he said. "Listening to our students, we realized that so many of them already had the skill sets, and having them come through the (credit-bearing) class again did not make sense."

A certificate also gives the college a quick way to evaluate student learning to determine whether a student deserves that credit. "Some (colleges) use portfolios to evaluate students, but that can be somewhat subjective," Slade said. "So we really came at this in a very straightforward way to verify that an assessment had occurred and that it was at a level we could award credit for."

The occupational programs at NMC attract students with diverse backgrounds and learning styles. But what they all have in common is a desire to expedite their education. "This is one method to basically accomplish

Jason Slade (right), a vice president at Northwestern Michigan College, talks shop with Richard Mathis, a welding instructor at the college. The college is one of a few in the state that are breaking with tradition and awarding college credit for industry-recognized credentials that students bring with them when they enroll. "We are trying to embed credits more and more in our programs, especially those that lead directly to the workforce," Slade says.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that," Slade said. "We want to get them quickly from point A to point B, whether that is the workforce, an associate degree, or transfer."

Jake Taber is one of those students on the fast track. A video game aficionado since his early teens, he always saw his future in computers, at first thinking he'd become a game designer, But in high school Taber realized the information technology field was the better choice—a career that offered more options for someone with his skills.

Taber took the opportunity to learn about and train for that career sooner rather than later. In his junior and senior years in high school, he pursued a dual-enrollment option in connection with a local trade school that honed his IT skills. After completing the requisite English, math, and other traditional courses, he got lots of hands-on training in information technology. So upon graduation, along with his high school diploma, he picked up two industry-recognized certificates: TestOut PC Pro and TestOut Network Pro, both of which recognize proficiency in basic IT skills.

Taber, then only 19, immediately built on these credentials with a TestOut A-Plus certificate. With these credentials, he landed a summer internship at a local nonprofit, where he taught staff how to use various computer programs and set up their new devices and software. He then quickly landed an entry-level IT position at Interlochen Arts Academy, where he expanded his learning on Apple products. "It was all because of these certifications that I was fortunate to get the jobs," Taber said.

Armed with this experience and his certificates, he started an associate degree program at Northwestern Michigan College. Tuition was free thanks to scholarships he had earned through being an Eagle Scout. And because of the college's new credit-for-credentials policy, he again got a head start: He was awarded six college credits for the A-Plus certificate. This allowed him to skip two college courses, cutting his time to a degree.

"They said, 'Just send us a copy of that certificate, or bring it to us, and we'll waive that required course,'" Taber recalled.

He moved quickly through his other courses, completing the required general education courses while moving on to his specialized work. He earned his associate degree in 2021 and, by passing the final college IT exam, also graduated with a Microsoft Technology Associate certificate. "So I had that to put on my resumé right away to get an IT job right away."

Taber recently took a job as an IT assistant at RJC Inc., a worldwide training, technology, and consulting company that specializes in the mold-injection industry.

Jake Taber doesn't just *work* in computers; he also plays with them, and has since childhood. He's an avid video gamer and maintains a massive collection of games and gaming consoles, many of them vintage. At last count, he claimed about 450 titles in a variety of formats—along with more than 30 consoles.

Northwestern Michigan College Vice President Jason Slade visits a hands-on classroom where instructor Brad Wortman works with student Jocelyn Joseph. Slade says the college works hard to award college credit for credentials that students have already earned. "We want to get them quickly from point A to point B," he says, "whether that is the workforce, an associate degree, or transfer."

Check the alignment

In deciding what credentials deserve credit, NMC administrators rely on the college's subject matter experts—the faculty and staff who are leading the individual program areas. Then they work through the course list to determine which certifications align.

"It can be really easy if the output of a course is a certification," Slade pointed out. "If the goal of the course is to earn a credential, and if someone already has that credential, they should get the credit."

Things get trickier, he said, when a student has a certification that doesn't line up with a particular course, but which might cover parts of multiple courses or a segment of a program.

Welding is an example. "We have different levels of certification, which are the American Welding Society requirements, and based on how that student progresses with those, we can backfill to the appropriate course," Slade said. "That lays out a little bit differently from our welding program, which takes students through a number of different welding processes, and then we have an overarching certification course, where they go and test for all those skills. So we just kind of map it back."

NMC has a distinct advantage in that it is a relatively small institution with about 3,500 students. That means it is nimble enough for students to have one-on-one conversations with advisors and key faculty members right from the start to make sure the college is giving appropriate credit, Slade said. "I like to give that caveat because some of our partners who are working their way through (credit for certification) are 10 times larger than we are."

Some community colleges are still reluctant to award credit for certification, but attitudes are changing—particularly as institutions in the vanguard show how it's done. Other institutions, Slade said, "want to know: 'Will this work for this program' or if it's not quite a perfect fit, 'How do we make it work?'"

So, in those cases, how ***do*** they make it work? The college has a couple of options, Slade said. It can restructure the academic course, or it can add a certification

to it. The college also could consider each student's experience on a case-by-case basis. "We might have somebody with a certificate but also with some additional work experience that shows they have met the required outcomes for that course. But somebody else may not have that, so you have to sift through it."

NMC offers a number of workforce development courses that don't follow the academic calendar. But as workforce faculty develop this non-credit training, Slade said, they work with the academic side to ask: "If we brought a student through this training and they got a certification, what would it look like on the credit side?" By having that discussion up front, he said, the college can design that certification along with the training to align with the academic program.

The college doesn't break out data on how many credit-earning certificate students continue on to an associate degree, but it has seen a changing demographic, Slade said. "These students usually come in with that credit that gives them a quick win in college, and once they have that success they want to stay. It gives them that confidence that they can excel in that program."

As to Jake Taber, he has no plans right now to pursue a bachelor's degree. "The IT field is focused on experience and certificates," he noted.

And as invested as he now is in information technology, he's not lost his love for playing and collecting video games. Shopping at vintage video stores and garage sales, he has amassed a collection of some 450 titles (he keeps a spreadsheet) going back to the original Nintendo of 1985. And yes, this means he's also collected more than 30 consoles.

If credentials were awarded for gaming, he would certainly qualify.

Help for the harried

The credit-for-credential program that benefited Taber isn't the only effort to boost educational attainment among Michigan's working residents. Another initiative, Futures for Frontliners, aims to help those who arguably worked hardest during the COVID-19 pandemic.

At the pandemic's height, when many workers retreated to home offices—working flexible schedules to care for their children—countless others had no choice but to work in person, often under rigid schedules that left them struggling to take care of their own children and ailing family members. They were health care workers, police officers, and repair technicians; servers, truck

With Jason Slade (center) listening in, welding instructor Richard Mathis works with student Zack Sawyer. Slade says Northwestern Michigan College's credit-for-credentials effort often boosts students' confidence. "These students usually come in with that credit that gives them a quick win in college, and once they have that success they want to stay."

Kelley Nelson, 39, is a student at Northwestern Michigan College. An information technology professional, she benefits from the state's Futures for Frontliners program, which aids those who held essential jobs during the pandemic. Nelson is studying computer information technology, has earned several certificates, and is on track to earn an associate degree in 2023.

drivers, and grocery clerks—all the people who kept our lights on, our food coming, and our packages delivered.

It is these "frontline workers" that the state of Michigan is rewarding with a big economic boost to their post-high school educations. With its Futures for Frontliners initiative, the state provides qualifying individuals with grants toward a degree or certificate at colleges throughout the state. Paid for with state emergency funds through the federal CARES Act, it's another effort to help the state meet its goal of having 60 percent of adults with college degrees or credentials by 2030.

Among the beneficiaries of the grant program is Kelley Nelson, 39, of Bellaire. All during the pandemic, Nelson was helping to run the IT system at Shanty Creek, a northern Michigan ski and golf resort, reporting in person every day to equip, train, and support other staff members who were working remotely.

Two decades ago, Nelson graduated from high school unsure of what she wanted to do. "College was expensive," she said, "and I had five sisters, so we kind of had to fend for ourselves." She planned to take two years off to help pay for college later, initially taking a job repairing golf carts at Shanty Creek. "I've always liked taking things apart and putting them back together," she said.

That led to a stint as an office assistant at the same resort, after which Nelson took a chance and responded to an opening for an IT staffer there. She had no formal training in computer technology, but she had taught herself enough in her office position, through handbooks and tutorials, to qualify for the job. Once in the position, she learned even more from IT staff, hands-on, including lessons in cybersecurity, which was among the business's growing concerns.

College was a vague plan in her mind, Nelson said. But at that time and in the many years since, "it was just never the right time," she said. "We were always short-staffed at the resort, and classes tended to be offered during the day." She had also bought a house, so money was tight.

But last year Nelson heard about Futures for Frontliners. "I worked during the whole pandemic," she said, "but I think a lot of people forgot about the IT people." Fortunately the state of Michigan did not, offering her a grant that cut her expenses at Northwestern Michigan

College by more than half. She is now studying computer information technology with a concentration in infrastructure and cybersecurity.

Nelson had at first planned to go only for certificates. And she is collecting them rapidly: Cisco, Microsoft Technology Assistant, Pearson Information Technology Specialist, Information Technology for Networking and TestOut Network Security. But as she has seen her credentials and credits accumulate, she now sees a clear path to a college degree. So she is going for it. She's on track to earn an associate degree in applied science next year.

The next few months will be challenging, Nelson admitted. She is still working full time (at a different resort), and going beyond the certifications means taking some pre-college math and a couple of English courses. Plus, the commute is a bear: Her new workplace is a half-hour's drive south of her home, and the college another half-hour south of that. But NMC, she says, gives her flexibility and exceptional support. For instance, she will be able to take math classes online next summer.

Throughout the process, Nelson's attitude about higher education has markedly changed. "I never really liked school," she conceded. "It wasn't horrible, but I dreaded the thought of spending all that money for college and the worry of dropping out." Those worries are gone, she said, and that has everything to do with the college going the extra mile.

"My teachers are amazing, and they make the classes so much fun. They also know that I'm working full time, so they worked with me to shift schedules. When I have to miss a class, they record it and email it to me after hours."

So with all of these credentials and credits, does Nelson want to continue on to a bachelor's degree?

"I've thought about that," she said. "But it costs a lot of money and takes a lot more time. In my IT field, some companies look for a degree, but in my current job, everyone is looking for experience and certificates, and that beats out a B.A."

Nelson lives in northwest Michigan, a region of rolling hills, cool summers, farms, and orchards. Her home is just miles from the cold, clear waters of Torch Lake, an isthmus away from Lake Michigan. She works at a resort that's as beautiful in summer as it is in winter. "God's country," she calls it.

"I'll see I how feel towards the end," Nelson said. "Right now I need a break."

Kelley Nelson revisits her youth, standing near a group of golf carts. At age 16, one of her first jobs was repairing such carts at a ski and golf resort in northern Michigan. Decades later, as the resort's information systems coordinator, Nelson worked throughout the pandemic, keeping the resort's IT system humming while most of her colleagues worked remotely.

Kelley Nelson, here taking an online class while visiting Traverse City, knows it will be challenging to finish her degree. But she also knows she's not alone in the effort. "My teachers are amazing, and they make the classes so much fun," she says. "They also know that I'm working full time, so they worked with me to shift schedules."

Program to aid underrepresented workers is playing well in Peoria

Jack Camp, 40, of Peoria, Ill., has faced higher barriers to education and employment than most. For one thing, he served more than 10 years in state prison for armed robbery.

"I grew up a bit rough," Camp said, significantly understating the case. He was raised in poverty by parents who were both addicted to crack cocaine. His mother (now 23 years clean, he proudly reports) shuttled in and out of prison, and his father was stabbed to death when Camp was just 13.

Jack Camp grew up the hard way and admittedly "made some bad decisions along the way." But he's on the right road now, thanks in part to the Illinois Workforce Equity Initiative (WEI). The state-funded program, designed to encourage underrepresented individuals to prepare for in-demand jobs, helped Camp earn his commercial driver's license.

"I struggle with that still," he said. His parents' troubles kept the family constantly on the move, and Camp racked up absences as he attended many different schools. In the 11th grade, he dropped out.

"I had a real problem staying focused, dealing with all that adversity and not having a stable place to live, and I made some bad decisions along the way," he admitted. He did time at the Illinois River and Shawnee correctional facilities and at Pittsfield Work Camp, where he was granted limited freedom to perform outdoor tasks. All the while, he was earning his GED and even some college credits. "I read thousands of books," he recalled. "I didn't want to close off my mind."

Upon release, Camp worked in a warehouse as a janitor and as a painter. He didn't mind those jobs, he says, but then a friend told him about a program at Illinois Central College where he could earn a commercial driver's license in six weeks—for free. "I had always liked to drive," he said, "so I took the initiative."

Camp is among the many beneficiaries of the Illinois Workforce Equity Initiative (WEI). The program provides state funding for at-risk individuals to enroll in short-term certificate and degree programs in high-demand industries—where jobs typically pay 30 percent above the living wage. In addition to full tuition, students get help with transportation, child care, and other life issues that can stymie educational success.

Illinois, like much of the nation, has enjoyed low unemployment in recent years. Even after the pandemic (and because of labor shortages it created), the state's jobless rate has hovered near 4.5 percent. But not everyone has benefited from the plenty. Young men of color, in particular, have been left behind. The September statewide unemployment rate for Black residents was 11.1 percent.

Educational attainment for this demographic lags as well. Of the associate degrees and certificates that Illinois community colleges awarded in 2019, more than a third were awarded to students of color. Overall, that was an increase in completions among Black and brown students, but 2 percent fewer Black students finished than did the year before. And while 37 percent of those completers were students in career and technical education programs, only 12 percent were African American.

Jack Camp takes time out from his trucking duties to enjoy a late-summer meal in Peoria with his extended family. (Clockwise, from Camp's left): Camp's mother, Christine Hollins; his wife, Tiffany Camp, and Tiffany's grandchildren, Per'Reon Payton, 4, and Ter'Reon Payton, 2.

Jason Juchems, now an assistant principal at Canton (Illinois) High School near Peoria, played a critical role in developing the Workforce Equity Initiative at Illinois Central College. While there, he helped build the developmental program that prepares students for college-level work—students who, because of past difficulty, often "don't have warm and fuzzy feelings about school," Juchems says.

It was this picture that prompted state Rep. Jehan Gordon-Booth, a Democrat who represents Peoria, to launch the initiative. Participants in WEI can select from more than 100 training programs, including in health care, transportation, computer technology, construction, and education. Demand for the programs is high: Many more apply than the program can accept. And of the more than 5,221 students enrolled, 74 percent are Black.

A number of Illinois colleges have embraced the program, and a few have been engaged since its inception. One of them is Illinois Central, a two-year institution in Peoria serving nearly 8,300 students.

Peoria, population 113,000, sits in a fertile agricultural region on the banks of the Illinois River. For decades a chief driver of the city's economy has been manufacturing—of heavy machinery, farm implements, and other products. Until recently, Peoria served as the headquarters for Caterpillar Inc. Although the heavy-machinery giant dealt the city a blow in 2017 when it moved to suburban Chicago (and recently announced a move to Texas), its factories still employ 12,000 people here. Other area employers are Komatsu, another manufacturer of heavy equipment; and Morton Industries, a manufacturer of metal products.

A changing local economy

But the region's economy is diversifying. In the 1990s, the manufacturing sector employed one in every four Peorians; today it employs just one in eight. Other large employers are in health care, education, and logistics.

One problem with Peoria's employment picture—and perhaps one reason that the city's economic growth rate is expected to lag the nation's—is the mismatch between the skills of Peoria's workforce and those needed for available jobs. (Among Caterpillar's top reasons for leaving Illinois and moving to Texas, a spokesman told the media at the time, was "access to talent.")

In particular, Peoria's Black residents, who make up 28 percent of the population, have felt the effects of institutional racism on the kind of education that brings those employment opportunities. Whereas 40 percent of white men in Peoria have a college degree, just 11 percent of Black men do. One in five Black men in Peoria (22 percent) lack even a high school diploma; the figure for white men is just 7.7 percent. One of five Peoria residents also live in poverty.

For these individuals, there are multiple barriers to returning to school, not least of which is the bad

experience they had with school in the first place. "These are issues that start in the ninth and tenth grade, and that leads to dropping out," said Jason Juchems, an area high school administrator who, until this July, served as workforce development manager at Illinois Central. "They don't have warm and fuzzy feelings about school."

In his role at Illinois Central, it was Juchems' job to prepare WEI students for college-level work. And for many of them, that meant re-teaching material normally presented in eighth grade.

Students' proficiency levels in reading and math run the gamut, Juchems said, starting as low as fifth grade. But WEI seeks to aid students 18 and over who are performing at the level of middle school. The goal is to get them up to 11th- or 12th-grade level in eight weeks, with students attending full time.

Participants generally take basic math courses related to their future jobs; students planning careers in construction, for instance, would learn (or re-learn) some basic geometry. Reading comprehension among these students also usually needs a boost, and courses in computer literacy are essential. All are taught in ways that also develop students' social and emotional well-being.

"We can have behavioral outbursts just like in K-8," Juchems said. So counselors also help students learn how to regulate their emotions, study effectively, and manage their time and money. Many students also need help working in teams, he said.

Jack Camp participated in the WEI readiness program six hours a day for eight weeks and was paid an hourly stipend for attendance and completion. He picked up basic computer skills, brushed up on his writing, and learned how to draft a professional resumé. Representatives from various industries exposed him to careers and conducted mock job interviews. "The program was great," Camp said. "I didn't waste the opportunity. I never missed a day or was late. I never gave excuses about anything."

With the basics under his belt, he enrolled in a CDL program at the college, with the WEI grant paying for his tuition and supportive services. "It was $3,500 or $4,000, and that was more than I could afford," he said.

While visiting his mother's home in Peoria, Jack Camp enjoys reading time with his stepgrandchildren, Ter'Reon (left) and Per'Reon Payton. Camp, who was just 13 when his father was killed, admits he still struggles with that loss.

Delivery driver Jack Camp (left) talks with his boss, Bill Gray, owner of Metro Moving and Delivery Service of East Peoria, Ill. Gray, who has owned the firm for more than 40 years, praises Camp as a hard worker and valued employee.

In this segment, much of which was hands-on, he learned about air-braking, shifting, turning, coupling, logbook-keeping, safety, and inspection. "They had trucks right outside that you could learn on," he said. "I'm not saying it was easy. Pulling up to the loading dock was the hardest."

Although he is now qualified to drive them, and did so for a brief time, Camp quickly decided that semitrailers were not for him. "You know how you feel when you are going down the highway and these big 18-wheelers are all around you? Well, I felt that way, too, and I was ***driving*** one." Camp is now content to be working a solid 40 hours a week driving a box truck—local routes only—for Metro Moving and Delivery Service in East Peoria.

More help on the way

Now in its third year, with 17 two-year colleges participating, the WEI program has produced promising results. But as the initiative continues, it has become increasingly apparent that the people it seeks to help face even more challenges than most. Of those 5,221 students enrolled, only half have earned credentials so far. This doesn't mean the other half won't finish; many students are still enrolled, and in 2020 and 2021, COVID-19 disruptions hit the program's target population particularly hard.

Still, the completion rates suggest that participants may need even more intensive services or require more tailored approaches.

Toward that end, the Illinois Community College Board has launched a plan to bring students even greater support and stronger links to employers. Through its new Employment Connection Project, the board and its colleges are working to better identify and engage employers to more reliably connect students to good jobs.

To do this, the program is making the most of existing partnerships, such as its alliances with the Illinois Manufacturing Association, the Technology Manufacturing Association and American Job Centers. And colleges will now assign each student an employment "navigator"—a counselor to connect students with local jobs. These counselors will work directly with employers and ensure that students have the essential skills to make a successful transition to the workforce.

Camp's transition was certainly smooth. In fact, he's likely to be fully employed as a truck driver as long as he wants to be. The American Trucking Associations reported a shortage of 80,000 drivers last year, an all-time high that could reach 160,000 by 2030. The organization wants to recruit a million new drivers over the next decade.

And Camp has no doubt about what secured his future. "WEI changed my life," he said.

Grant program gives California residents skills they can truly build on

When Catiana Beaver, 22, thinks about her junior and senior years of high school, she remembers the question on everyone's lips: "'Where are you going to college? Are you going to UC-Berkeley? What about UC-Davis?' People always assumed you would be going into a white-collar job," she recalled. "I had no idea about opportunities in the trades. No one ever told us about that."

But building things, fixing things, creating with her hands—***that*** was the sort of work Beaver had in mind.

Cat Beaver listens intently as instructor Troy Kuhns, chair of the Welding Technology department at Victor Valley College, explains properties of the metal she'll be working with. Not surprisingly, in a state where construction jobs are booming, the college has a robust welding program, with 54 welding stations and some 250 students.

All she needed was some encouragement. Several years later, she got it from an unlikely source—a beekeeper with whom she was volunteering. The beekeeper told her about a program that provided free tuition for training in the construction trades.

At the time, Beaver was working retail at Hot Topic, having dropped out of the local community college after failing several courses—all but deliberately. "I was rebelling," she now admits. "I kind of bit myself in the butt." Her single mother and her brother had urged her to become an accountant, much as her brother was studying to become a lawyer: Jobs were secure, pay was good. But the courses—and the career path—left her uninspired. "I was being pushed into a desk job," she said.

Once she abandoned that path for good, Beaver took her friend's advice and signed up for the California High Road Construction Careers program, a state-funded initiative that aims to direct more residents into jobs in the booming construction field. Beaver was assisted by a grant from the Metallica Foundation, a nonprofit founded by the rock group.

She's welded to her craft

Perhaps fittingly, given her grant's heavy-metal roots, she said, "I fell head over heels in love with welding."

And Beaver is in the perfect place for this new love to flourish.

With its growing number of housing developments, warehouses, bridges, and roads, California is a hotbed of new construction, promising countless opportunities for workers skilled in the building trades. Between May 2021 and May 2022, California was second only to Texas in new construction employment, with 27,800 new jobs, an increase of 3.1 percent.

In the Central Valley alone, 8,000 jobs have been created by the $5 billion project to connect Los Angeles to San Francisco with a bullet train making the 500-mile trip in three hours. Although the ballooning price tag has put much of the project on hold, work continues on a 172-mile segment to connect a few cities in the Central Valley. Along with a boom in warehouse construction, a local study projected $47 billion in infrastructure money coming to the Central Valley over the next 10 years.

For an agricultural region that has struggled economically, that means a steady demand for carpenters, electricians, masons, welders, and more.

But industry experts say too few students and workers are skilled for—or even aware of—California's numerous construction opportunities. That is the reason for the High Road Recovery Construction Careers, state grants for short-term training programs that prepare students for apprenticeships in the building trades. The program is designed to serve people who are underrepresented in the field, including people of color, the formerly incarcerated, and women.

Cat Beaver, flaming torch in hand, is surrounded by female classmates in her welding program at Victor Valley College (from left): Ileana Macias, Annalisa Weathers, and Madison Mills. Beaver says she and the other women in the program are "absolutely united," adding: "We have each other's backs. They are the kinds of tough women we need."


LINCOLN
ELECTRIC

According to North America's Building Trades Unions (NABTU), construction apprentices can earn up to 60 percent of full wages for construction professionals while training for these jobs.

Toward that end, California's community colleges have adopted NABTU's Multi-craft Core Curriculum, known as the MC3. It includes 166 hours of instruction, including 20 hours of hands-on training. Students attend the program full time for eight weeks, five days a week. Those who complete the program earn an MC3 Certificate—proof to employers that they have the skills to start as an apprentice in any number of construction fields.

The curriculum teaches basic academic and life skills in context with the construction trades. In math classes, for instance, students relearn high school geometry and algebra in a way that shows them how to calculate the area of a floor, the slope of a roof, or the angle for a pipefitting. They familiarize themselves with calipers, protractors, and other tools.

In addition to basic math for construction, students learn to read blueprints, become familiar with tools and materials, and get basic lessons in environmentally sustainable construction and financial literacy. They are also trained in first aid practices, including CPR, and hazardous materials-handling toward a certificate known as the OSHA 10. The certificate is proof from the U.S. Occupational Safety and Health Administration that the student has completed the 10-hour course covering general safety and health hazards for entry-level workers.

In a typical project, the students build a 12- by 12-foot shed from start to finish. They design it (having learned to read blueprints); calculate square footages and angles; lay floors; install windows, fastening, trim and moldings; and hang drywall, sheathing, and exterior siding.

Fresno, San Bernardino, and San Diego are three California counties in which community colleges have embraced the High Road Recovery Construction Careers initiative. Their programs differ slightly, tailored to their particular populations and local workforce needs, but they have the same goals.

The city of San Bernardino, the seat of San Bernardino County, has only recently emerged from bankruptcy and is dealing with a high degree of homelessness, poverty, and crime. So the High Road initiative focuses here on underserved populations—people of color, formerly incarcerated individuals, and residents 18 to 24 years old. It has also set a particular goal of serving women, including the 30 who are among the current group of 101 participants. Women are in such strong demand in the trades that they aren't required to meet an income threshold to join the pre-apprentice program.

'We want to empower women'

"We want to get rid of the stigma for women in construction. We want to empower women," said Stacy Garcia of the San Bernardino Community College District. Added Ashley Matthews of the Fresno Regional Workforce Development Board: "Traditional female employment tends to be on the lower-paying side, but in this industry, whether you are male or female, it doesn't matter. If you are a journeyperson, you are making prevailing wage. And we want women to have access to these good-paying jobs that can support a family."

Thanks to her work in the welding program, Cat Beaver is looking toward a bright future. Soon, she plans to seek an internship at the Armstrong Flight Research Center at Edwards Air Force Base. "I'm applying, and I'm hoping this could happen next summer," she says. "But if I don't get it, I'll try again. I have the confidence and the contacts, and I am not stopping."

Stacy Garcia (foreground), manager of workforce development for the San Bernardino Community College District, attends a recent conference of the California Community College Association for Occupational Education. Also in attendance: Frank Castanos (left), who directs workforce development at Victor Valley College, and Deanna Krehbiel (center), interim director of workforce development for the San Bernardino district. The three say collaboration between the districts has helped boost student success in both.

Now living near Victorville in San Bernardino County, Cat Beaver is a rarity in the construction field—welding in particular. Of 80 to 100 people in her welding classes at Victor Valley College, she says she can count the number of women on one hand. She's had few real difficulties with the male students, saying: "We are all here to learn." But "the women are absolutely united," she said. "We have each other's backs. They are the kinds of tough women we need."

In the second half of her coursework at Victor Valley, Beaver is becoming increasingly proficient in handling a welding torch. An inherently dangerous enterprise, welding requires great precision and extreme patience, and Beaver admits it took her a while to develop the latter. "The first class I took was so frustrating," she recalled. "It is so hard. You are looking at a single focal point, and there are dozens of variants and so much precision. You have to do the same thing over and over hundreds of times to get it right."

Women do have some handicaps in the field, one of them being arm strength. Strong limbs are essential when the welding torch must be held aloft—as in doing ironwork on a multi-story building. That kind of work also requires a strong constitution. "You can be 12 stories in the air, and that takes a special heart," Beaver said. "You have to get into some physically difficult body positions. You are in a harness, but if you fall, you're just dangling."

Undaunted, Beaver is anxious to perform this sort of work, so she routinely lifts weights.

Although the grant pays her full tuition, it doesn't cover equipment, an expense that welders can't skimp on. "You are getting burned a lot," she said matter-of-factly. Dealing with that hazard means shelling out $300 for a full-face helmet, $200 for a protective leather jacket, and at least $100 on other tools. No matter, Beaver said. "I have always loved fire and seeing how the iron gets hot and how you can bend it."

Whatever obstacles she's faced, Beaver has avoided one that confronts many other program participants—particularly those in the Fresno area: the language barrier. There, many of the preparatory math and English courses are taught much like English as a Second Language. That's because the region has a large Hispanic and immigrant population, and language has often been a barrier to passing union exams.

"We want to prepare them and give them the best chance possible," said Ashley Matthews of the Fresno Regional Workforce Development Board. "These are great jobs, and we want to help people get into them."

After taking the math and English courses (taught in context) for nine weeks online, students move on to the Multi-Craft Core curriculum (MC3), which they pursue full time. Some of these students may be receiving unemployment benefits, others may be working part time, but those with no income may get a need-based hourly wage as they train.

Language isn't the only barrier to earning a certificate, of course. That's why students in Fresno can also get child care referrals, reimbursement for gas and other transportation expenses. They also can get referrals for legal services through the Clean Slate program, which helps restore driving licenses suspended for fines that students couldn't afford to pay.

Getting physical

The pre-apprenticeship program even helps it students get into shape. "We offer physical training throughout the program so they can be in good condition for work," Matthews said. "The number one reason someone dropped out of that first-year apprenticeship is due to the physicality."

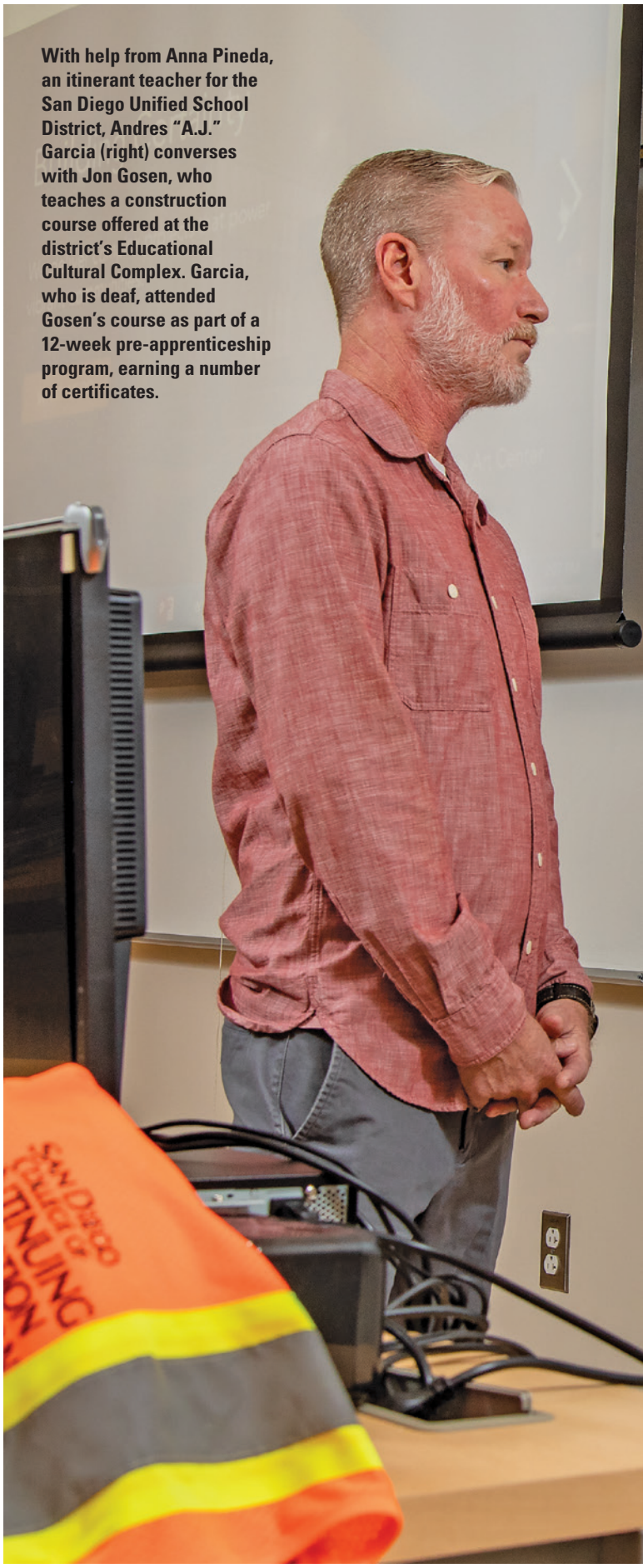
Although the construction careers program is deeply centered on student success, the colleges stop short of guaranteeing completers a job. "We don't do that because construction work is not for everyone," Garcia pointed out. "People may go through the program and discover that maybe it wasn't the right industry for them.

"But we always want our participants to know that this program is going to work as hard for you as you do for it," she added. "We are out there helping them find jobs, helping get that resumé written, improve their interview skills. While it's never a guarantee, if they put in the work, it's highly likely they will find a good-paying job."

A.J. Garcia of San Diego is one trainee who is confident of landing one of those jobs—perhaps because he's faced far more challenges in his 19 years than most. Deaf since birth, he struggled in an educational system ill-equipped to serve him, and dropped out before earning his high school diploma. With American Sign Language as his native tongue, he still struggles with reading and writing in English.

But at the Educational Cultural Complex of the San Diego College of Continuing Education, Garcia is back on an educational track, thanks to free tuition from the High Road program, wraparound support, fluent interpreters, and a passion for the building trades. He hopes later to earn his GED.

"I was weighing my options, and a friend made me aware of construction careers," Garcia said through an interpreter. "I was really enamored with the construction field. I loved the opportunity of being able to afford a home and to be able to take care of it."



With help from Anna Pineda, an itinerant teacher for the San Diego Unified School District, Andres "A.J." Garcia (right) converses with Jon Gosen, who teaches a construction course offered at the district's Educational Cultural Complex. Garcia, who is deaf, attended Gosen's course as part of a 12-week pre-apprenticeship program, earning a number of certificates.


HOUSING ASSISTANCE
SAN DIEGO
CENTER FOR
CHILDREN

The ability to care for a home is hardly something Garcia takes for granted. His own family of five immigrated to the U.S. from Mexico. His father had graduated from high school in that country, and his mother had no high school diploma. They struggled financially. "We didn't have the money for home repairs," Garcia recalled. "But if you can fix it yourself…"

At the beginning of the program, "I felt isolated and frustrated," Garcia admitted. "There were money issues and family issues. But then I started to learn new things, and I felt invigorated."

Garcia attends the MC3 pre-apprentice program at the San Diego complex full time—three days a week in person, two days online. "We learn about construction safety, materials, measurement, and tools. There are a lot of guest speakers and field trips. We go to construction sites and watch them work and hear them explain what they are doing. They show us the ropes."

The class recently visited a building site with members of the Southwest Regional Council of Carpenters. "That was really interesting, and I learned a lot," Garcia said. "We asked a lot of questions—like about math and wages in different states. We learned different techniques with hammers." He added: "I really, really love carpentry."

Garcia, who attends classes with an interpreter provided by the college, is the only deaf person in his program. But, he says, "I have great rapport with the others. I've made a lot of new friends." He said he's faced no more than the usual communication challenges. On the job, lacking an interpreter, he gestures, writes notes by hand, and types out messages on his phone. "We deaf people get by just fine," he insisted.

Garcia's tuition is paid in full through the High Road initiative, and because he is attending full time, he earns a small stipend as well. "I get paid while I am learning," he said. "It's so great!"

In August, Garcia completed the pre-apprentice program and earned an NABTU Apprentice Readiness Certificate, which shows he has the skills to take on an apprenticeship in any of several building trades.

Having learned the basics and saved his money, he now says: "I'm ready to get to work. I have done a lot of networking and collected a lot of business cards. We'll see where the wind takes me."

In Victorville, meanwhile, Beaver is feeling similarly upbeat. The welding program has helped her make some valuable job contacts. A favorite instructor suggested she apply for an internship at the Armstrong Flight Research Center at Edwards Air Force Base, with which he is affiliated. "I'm applying, and I'm hoping this could happen next summer," she said. "But if I don't get it, I'll try again. I have the confidence and the contacts, and I am not stopping."

When interacting without an interpreter, A.J. Garcia (right) and Jon Gosen keep the conversation going via text message. Garcia, wearing work gear provided by the program, especially enjoyed a recent field trip to a building site with members of an area carpenters union. "That was really interesting, and I learned a lot," he says. "I really, really love carpentry."

Joined by his mother, Brenda Aguilera, A.J. Garcia proudly displays his recently earned Apprentice Readiness Certificate, which shows he has the skills to succeed in an apprenticeship in any of several building trades. "I'm ready to get to work," he says. "I have done a lot of networking and collected a lot of business cards. We'll see where the wind takes me."

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