

Aspire High, North Carolina's first public trade high school, trains the next generation of workers. For local companies, the students can't graduate soon enough

By JEN TOTA MCGIVNEY

Photographs by HERMAN NICHOLSON

TRICKS *of the* TRADES

“Are We Doomed?” In this University of Chicago course, students learn how humans might meet our collective demise. Nuclear weapons, climate change, artificial intelligence: Experts across fields come as guest speakers who share predictions of the threats that might end us all.

A recent *New Yorker* story shared how Geoffrey Hinton, a former AI developer and now a harbinger of its risks, attempted to temper the doom in this class earlier this year. Asked how to navigate a changing world, the 76-year-old offered students two pieces of advice. His first tip, a joke: It's a good time to be an old person. His second tip, more serious: It's a good time to be a plumber.

AI can do a lot of things, but it can't work with its hands. ChatGPT can read the entire Internet, but it can't fix a toilet. It can't build a deck. Soon, it may be a safer career option to become a plumber or a carpenter than, perhaps (whimper), a writer.

The U.S. faces a shortage of skilled trade workers. Ask anyone who's needed a tradesperson lately, and they'll tell you. Ask me! I'll tell you about the delays on a home project last year due to a lack of local electricians and carpenters. Ask Justin Elliott! He's the president of Precision Plumbing in Matthews, and he's dealt with workforce shortages for decades.

“It's a problem. I've been at Precision for 25 years, and (labor shortages) have been a problem as long as I've been here,” Elliott says. “In the next five years, probably 25% to 50% of my top talent will be retiring. They've got a skill set that is just not learned from a book; it's learned through experience and hands-on learning. As they retire, that knowledge retires with them.”

This sounds like opportunity to the students at Aspire Trade High School in Huntersville. While the students in Chicago ponder how things may go poorly, future plumbers, electricians, and welders are here to study under experts and prepare to enter the workforce with an increasingly rare and in-demand skill: making a living by working with their hands.

ASPIRE, WHICH OPENED IN 2023, is the first public trade high school in North Carolina. Students can choose from 10 trades—including masonry, HVAC, plumbing, medical coding, and culinary—as they take mandatory core classes in English, math, and social studies. By the time these teenagers graduate, they'll have high school diplomas as well as certificates in their trades. Graduates can choose to pursue four-year degrees or use their credentials to work in a job market that demands their skills right now.

This is an especially attractive option for students unsure about whether they want, need, or can pursue four-year degrees, or those who don't learn well in traditional classroom environments. As trade programs for high schoolers have declined over the past few decades in favor of curricula geared toward standardized testing, these students' strengths have often been neglected.

“Parents who have hands-on kids worry that the typical school environment is not going to prepare that student for a career opportunity,” says Jennifer Nichols, Aspire's principal. “When parents hear about us, they're like, ‘Oh my gosh, this is so amazing,’ because it's an opportunity they never thought they'd have. ... (Students) are getting a \$30,000 education for free in this building, and they're coming out with basically what they would have picked up with an associate's (degree) from a community college.”

As a public school, Aspire is free to attend, and it draws students from around the Charlotte area. All students learn from experienced trade professionals, many of whom have owned their own businesses. The school prioritizes socioeconomic diversity, weighting its enrollment lottery to ensure at least 30% of students come from low-income homes. On one level, this school may change the trajectory of the lives of its students. On another, it displays how our city might start to reverse its notorious lack of upward social mobility by creating more opportunities for more people.



Jennifer Nichols, Aspire's principal, taught for nine years in Michigan before she moved to North Carolina and immersed herself in nonprofit work.



Sophomore Nigel (opposite and below) prefers real-world application of his welding lessons to sitting at a desk.

EBONY COVINGTON'S SON, NIGEL, has always been a good student and curious learner. At his middle school, he took all honors classes in an International Baccalaureate program, which focuses on critical thinking and global awareness. But Nigel, 15, is a hands-on learner who wanted to take what he learned in books and use it to create things, to observe how those concepts work in the real world. It's a style of learning seldom offered in typical classrooms.

"He wants to be as prepared as possible," Covington says. "He doesn't want to be put into a box. He goes back and forth about what he wants to do, as most kids do, because he has many interests."

One day in eighth grade, Nigel brought home a brochure about a trade high school that would soon open in Huntersville. He pitched the idea to his mom: At Aspire, he could keep his options open. If he wanted to go on to a four-year college right after high school, he could; if he wanted to work for a few years first or pursue a career without a four-year degree, he could do that, too. But mostly, he could learn in an environment that would let him use his hands and take breaks from a desk. His enthusiasm sold his mother. Since Covington enrolled him as a freshman last year, she's watched him become a more confident, enthusiastic student.

"Back when he was in elementary and middle school in a more traditional setting, I'd ask him what he learned that day

at school, and he'd just say, 'Nothing, really,'" Covington says. "Whereas now at Aspire, he has something to talk about each day. Even if he's talking about English class, he's still excited about what he learned that day."

Nigel, attracted to the idea of creating things from metal, chose to study welding. Even as freshmen, he and his classmates learned welding basics while doing real work: They helped install metal lockers and worked in a lab with the same tools that professionals use.

SteelFab, a Charlotte-based company and one of the largest steel fabricators in the country, sponsors Aspire's welding lab. Precision Plumbing advised the school in setting up the plumbing lab down the hall. Upstairs, Atrium Health sponsors the medical assisting and coding lab. Each program has a relationship with a local company, which helps set up labs and advises on curricula. Before students begin paid apprenticeships during their senior years, they're already familiar with the equipment, terminology, and practices of local employers.

When Nigel graduates in 2027, he'll have a high school diploma, but he'll also have a level-three certificate and an apprenticeship with SteelFab that will qualify him for a job if he chooses to enter welding.

But what Nigel won't need to get that first good job? College debt.



Jack Whitley, an auto shop instructor, uses a 1967 Chevrolet Chevelle to illustrate how hard work and the right parts can convert a \$1,000 beater bound for the junkyard into an \$8,000 or \$9,000 collectible. He and his students restored only half of the car (opposite and below) to illustrate the difference.



FOR THE PAST FEW DECADES, the goal of high school has been to prepare students for a four-year degree, which, the assumption goes, is required to make a good living in the 21st century. That assumption is changing.

The college debt crisis has prompted a rethinking of educational expectations. Over the last 20 years, in-state tuition at public universities has increased about 56%, adjusted for inflation (158% not adjusted). The average person with a bachelor's degree graduates with nearly \$30,000 of debt. Effects of so much debt, so young, can be crippling long after graduation. It can delay or quash plans to buy a home, start a family, and even retire.

Is a four-year degree necessary? It depends on the student and their plans. Robert Farrington is a personal finance expert and the founder of The College Investor, which coaches millennials to get out of debt and start investing. He hopes more students and parents challenge the notion that a four-year degree is for everyone.

"I'm very bullish on trade school in general," Farrington says. "When you look at the pendulum of where high school graduates are going, for the last 15 years or so, it's been—very much been—all four-year traditional college. But then in the last two or three years, people have really started to think twice about that and realize that there's a lot of other options out there."

Aspire's mission is to show students how many options they have. When I talk with freshmen and sophomores—which, in Aspire's first year, were its only students—the word "options" comes up in nearly every conversation. They consider multiple versions of their future selves: as journeymen, business owners, college graduates. This is intentional, Principal Nichols says. Aspire's teachers have decades of experience and mentor students about the many ways they can use the skills they're learning.

"It's about the brainstorming. It's about the whats, the whys, the ifs, and the what-could-bes," Nichols says. "Our instructor-mentors will say, for example, 'Did you know that you can weld underwater?' And the students are like, 'Whaaaaat? You mean I can scuba dive and weld? What would I need to do to do that?'"

"The biggest thing is telling students that these jobs exist," Farrington says. "There are so many jobs that are obscure because they're not talked about, but they have the potential to be very lucrative."

To make his point, Farrington tells me about the most in-demand trade job today: an elevator service technician. Think of the skill set. An elevator service technician must have mechanical skills as well as climbing skills. How many tall buildings does each city have, and how many people in each city have the experience to do this work? The average salary for this job in North Carolina is more than \$110,000 a year. "If you went to a rock-climbing gym and told the teenagers there about this," Farrington says, "some would probably be like, 'Hey, that's kind of cool.'"

Atrium Health, which sponsors the medical coding and assisting labs, also coaches Aspire students in their options. A health care company is a corporation, so it needs accountants, marketers, information technology specialists, and more. Graduates of Aspire's medical coding or assisting programs can qualify for jobs at Atrium Health right out of high school, and after they're established at the company, they can get tuition reimbursements to advance their careers at the company in clinical or non-clinical roles. It's not only a foot in the door but a leg up.

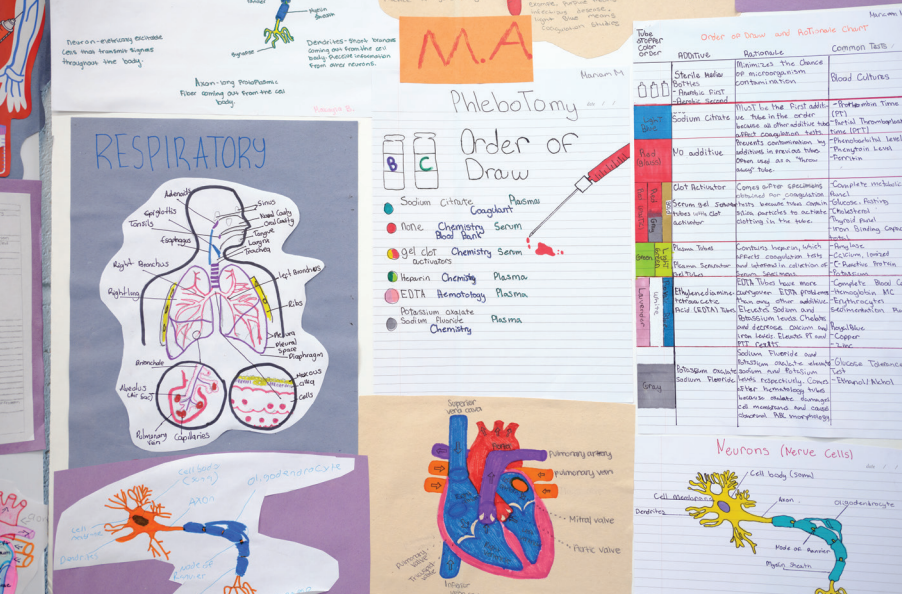
"When a lot of students think of jobs in health care, they think of a doctor, they think of a nurse," says KeWanda Thompson, a strategist with Atrium Health Community Engagement and Corporate Responsibility. "We do so much at Atrium that we have so many opportunities that a lot of people don't understand. There are a lot of opportunities in non-clinical fields here, too."

Whatever fields students choose to enter, trade skills can be a lifelong asset. Anyone who owns a home or a car knows how expensive carpentry, plumbing, or mechanical work can be. It's a point that Jack Whitley, an auto shop instructor at Aspire, taught his students with the help of a 1967 Chevrolet Chevelle. The car is beautiful, seemingly mint condition—half of it, anyway. The Chevelle's other half reveals the car's true history: It had been left for junk, forgotten under a tree in Huntersville for years. Whitley offered its owner \$1,000 to prove a point to his students: What can they accomplish with this car and \$1,000 in parts?

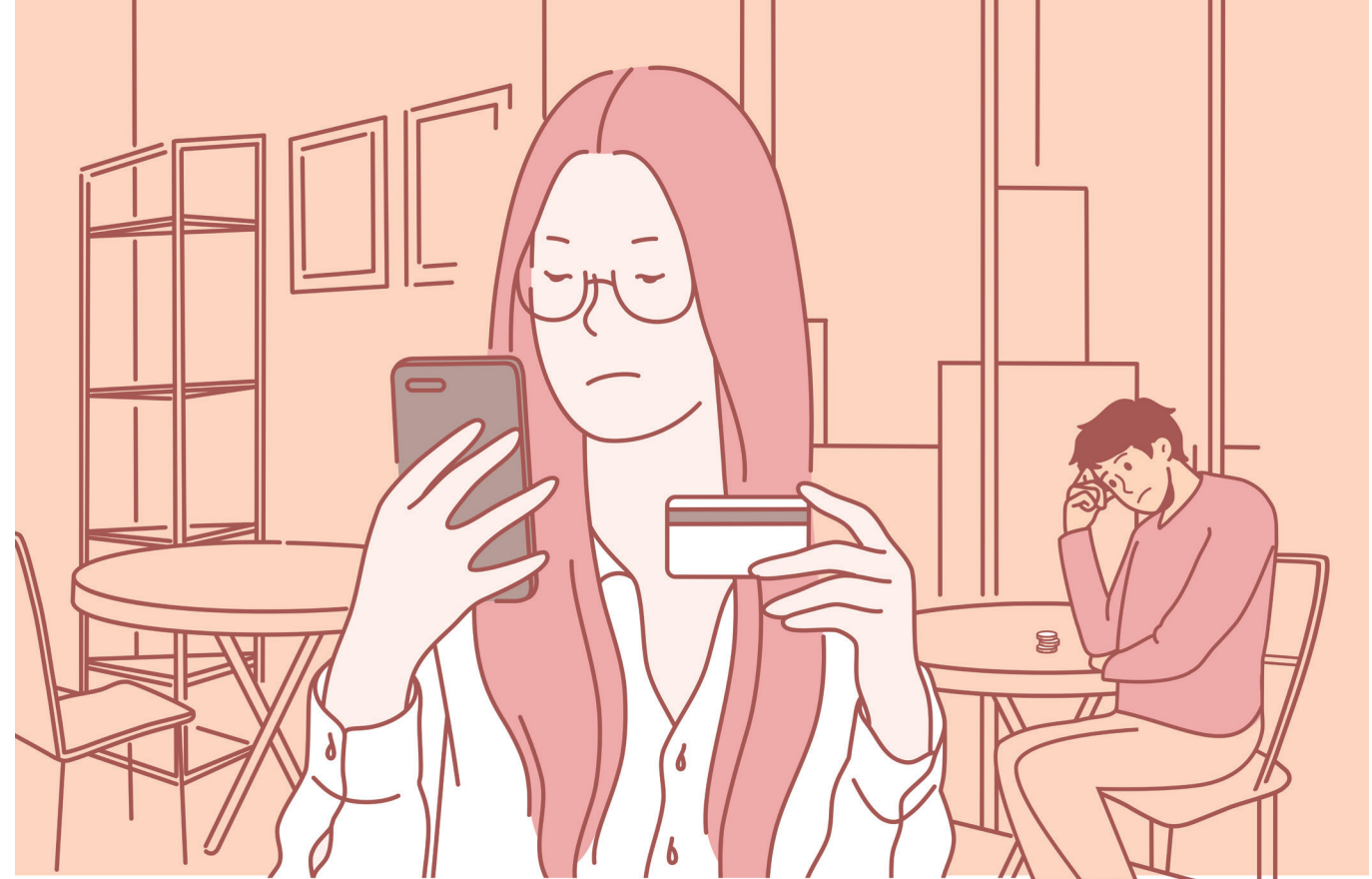
When freshmen and sophomores first entered Whitley's class last year, "most didn't know a lug wrench from a floor jack," he joked. By the end of the year, he'd taught them how to sand, repair dents and holes, and paint. He kept half of the Chevelle in its original state so they could see how far they'd come by fixing up the other half.

"I tell them," Whitley says, "you can take a \$1,000 car and turn it into an \$8,000 or \$9,000 car with some hard work."

One of the students who worked on the Chevelle was sophomore Braxton Raymond Becker. Braxton had never worked on a car before this one, and he beams with pride as he tells me about the work he and his classmates did to turn this Chevelle



Atrium Health sponsors medical coding and assisting labs and coaches students in alternatives to nursing.



Account Anxiety

Like their parents, teenagers stress out about money

BY GREG LACOUR

into a beauty. Braxton doesn't know whether he'll pursue a career in auto body repair, although he does like the idea of owning his own shop one day. But he's discovered how much he enjoys working with cars—and how those skills can translate to good money.

"If I can have a good-paying job after high school for four or five years," he says, "then I can help pay for college if I decide to do that."

ASPIRE STUDENTS cover a range of learners. Some, like Nigel, come from honors programs. Some have autism, ADHD, or other conditions that can make it difficult to learn in a traditional setting. Some are children of immigrants who have been in the country only a few years, while others are children of Charlotte natives. About 360 students attend this year, and the enrollment will reach 523 once all four classes—freshmen to seniors—have filled.

"We give more students the opportunity to be successful," Principal Nichols says. "We're a rigorous program, but we're not one-size-fits-all."

What the students share is a proclivity for hands-on,

project-based learning—a trait that sometimes doesn't show until their teen years. Elementary schools offer a lot of project-based learning, middle schools less so. By the time students hit high school, they wonder why they've begun to struggle. They didn't change, but the teaching did. When such students move to Aspire, school starts to make sense again. And when they graduate with skills that companies need, their futures open. Aspire offers previously overlooked students a running start in lucrative, in-demand careers, some of which will literally help build this city.

"For a lot of these families, they've never been able to break cycles and create generational wealth. We've got a lot of families where this particular student is going to break out and do something that the family has always wanted their kids to do but didn't dream they'd have the opportunity to do," Nichols says. "If you take those students who really want to be successful and start mentoring them as freshmen, you're going to see some really amazing professionals." 📧

JEN TOTA MCGIVNEY is a writer in Charlotte and the back-page columnist for this magazine.

A RECENT WELLS FARGO STUDY reveals a few troubling things about teens and money: Most wish they knew more about how to manage it; they worry about it as much as their parents, who themselves worry about it more than they used to; and they're increasingly inclined to lie about it.

A research firm conducted the national survey of 3,403 adults—and 203 teens aged 14 to 17—in fall 2023, and Wells Fargo released the results this year. Anxiety over money is a common theme for both groups, but the study found that teens worry not just about money itself but how telling people about their or their families' finances will make them look. Some key findings:

- » About half of surveyed teens are reluctant to talk about how much their homes are worth (50%) and how much money they grew up with (45%).
- » Nearly half are reluctant to have honest money conversations because they might feel judged (44%) and because it might change how others see them (41%).
- » Half have lied about how much they spent on things, and 42% have lied about how much they've saved.
- » More than half (56%) report that having an honest conversation about money would reveal a lot about them.

- » During the three months before the survey, 62% cut back on spending, 58% began to worry more about money, and 47% sought financial advice from others.
- » A large majority (83%) wish they knew more about managing their money.

Wells Fargo undertook the survey to better understand Americans' attitudes toward money—their "money story"—and their own financial strategies and habits, the bank said in a release. The survey of adults reveals, among other things, that they worry far more about money now than when they were growing up, and more than half said their money story is different from that of their parents. "The data tells us that Americans—no matter who they are—are uncertain about the sustainability of their financial lives," said Michael Liersch, the bank's head of advice and planning.

The release includes an assortment of anonymous teens' quotes from the 45-minute interviews. They cover everything from their experience of opening accounts to getting part-time jobs to wanting to have control over some money so they don't have to ask their parents for it. One revealed the need for financial education: "Is a bank account like your savings or something? It's like a wallet?" 📧

GREG LACOUR is the editor.