# A Z R E

### **BUILD YOUR FUTURE**

### Valley high schools bring back construction courses

By REBECCA L. RHOADES









Starting in the 1970s, America's educational system began steering students toward one of two options: college or military service. At the time, many schools offered a variety of vocational classes, such as wood and metal shop, drafting, automotive repair and even culinary arts. But as educational budgets shrank during the 1980s and into the 2000s, those elective courses were the first to be cut.

Now, decades later, trades industries are feeling the results.

Across the country, the need for

construction workers has been growing rapidly. But the supply of skilled labor continues to dwindle. According to the 2022 Construction Industry Forecast by Wells Fargo, the ability to hire qualified workers is a top concern of contractors and industry executives. So while there are more college-educated Americans than ever before, there's a limited number of people who can build their offices or dream homes. Arizona, in particular, has been especially hard hit. Demand for residential and commercial buildings remains at all-time highs, but the state's construction industry is suffering a dearth of skilled tradespeople.

"We've been experiencing massive job growth in the sector over the past few years," says Tom Jarvis, partner at Willmeng. "Pair that with the baby boomer generation of skilled tradesmen exiting the market and the fact that it's getting harder and harder to find experienced people. There's a real need."

#### FIELD OF STUDY

To answer that need, Valley schools are bringing back hands-on courses

82 | January-February 2023









Tom Jarvis



Blake Marshall

**Stephanie Streeter** 

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community that is high-minority and high-poverty, the school has more than 3,000 students.

For a more focused educational experience, Trevor G. Browne offers a College and Career Academy, which breaks down the school into smaller learning communities. Various academies offer 14 career pathways, ranging from global media to health services. Students in the Academy of Fine Arts and Industry can follow a career pathway in construction that will take them from their freshman year to graduation. "Getting to take coursework that will help you gain internships, connect with employers and even find paid opportunities will keep you engaged in your learning, provide a more personalized education and make your high school experience more relevant to a future interest," says Stephanie Streeter, principal at Trevor G. Browne. While the high school has always offered some career and technical education (CTE) courses, the academies are more akin to a college major. During their freshman year, students pick a pathway, which will guide their coursework during their sophomore,

junior and senior years. If they complete all the requirements, which are set by the state, the student will qualify for certificates and, depending on the specific classes they took, dualenrollment college credits.

During their senior year, students will be required to complete an internship. "Our goal is for them to have some type of internship, whether it's during the school day, after school or during the summer," Streeter explains. "When you hear the word 'construction,' you sometimes think, 'Oh, it's building houses.' But there's so much more to construction than that. So it's important that students understand that by interacting with industry professionals. "All of our pathways are designed to be high-wage, high-demand, highskilled jobs for students, and that will directly impact Arizona employers," Streeter continues. "The sooner they can get exposed to those industries and get passionate about working in them, the more opportunities they'll have for internships that will benefit not only the city or areas surrounding the high school, but also the entire state.

**BUILDING HER FUTURE:** Leona Charley gains experience as an apprentice for Canyon State Electric, working on the Hilton North Scottsdale at Cavasson. She graduated as a journeyman electrician on Dec. 9, 2022.

designed to expose students to the trades and provide them with career path opportunities that lead directly to the construction industry.

Trevor G. Browne High School is part of the Phoenix Union High School District. Located in an underserved



## **BUILD YOUR FUTURE**

#### **BUILDING EXPERIENCE**

At Estrella High School in Avondale, Mark Adams has been teaching carpentry for the past two years. The program, which launched during the pandemic, is a two-year projectbased practicum that gives students a glimpse into residential construction.

The curriculum was written by the Southwest Mountain States Regional Council of Carpenters, and at the end of the program, students can a state assessment test and become certified in the field.

"Our goal is to prepare these kids for the future, because it's not always about going to college. There are jobs out there that they can move into immediately after graduation," Adams remarks. "And with the baby boomers retiring, we're going to need to fill those positions."

Blake Marshall, construction technology instructor at Youngker High School in Buckeye, teaches a similar carpentry program. Firstyear courses emphasize the basics: safety, accuracy, proper tool usage. Students build small projects, ranging from toolboxes to Adirondack chairs. "Year two steps into the realm of construction carpentry," Marshall says. "We talk more about the elements that go into building a house or structure." According to Adams, his students at the end of the program "should be able to build a house frame. They will know how to make joists, trusses, headers — anything that goes along with the framing itself."

Although the programs at both schools are relatively new, Adams and Marshall are quick to point out that growing interest in them by students, especially female students. "I have more young ladies in my class than ever before," Marshall says. About 15% of the students in his level one and two classes are female.

Adams points out that attendance in his classes this year has increased by 50% over last year. Of the 30 or so students in each class, 20% to 30% are female.

All these programs, whether they're specialized courses of study or individual elective classes, are designed to expose students to skills and career opportunities about which they otherwise may not have known. And while their impact on Arizona's construction industry won't be felt for a few more years, the interest in them from students and businesses continues to grow.

"We just started this journey, but we already have so many industries that are excited to partner with us and our students," Streeter says. "I think that programs like our career academies can be a powerful model for schools in the future, and we're hopeful that our students will not only lead the way for the next generation, but that the coursework will be meaningful for them."

Jarvis adds, "There are so many opportunities out there and not just with the physical side of construction. At Willmeng, we have people who have careers in safety, in marketing, in business. It all starts with awareness, and if we could just increase these programs by a couple schools each year, eventually we will be able to get the message out there about all the wonderful lives people can have in the construction industry."



84 | January-February 2023