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Putting the brakes on auto shop - Spiraling costs, emphasis on academics among causes cited

By Alex Lyda

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When cars had no computers and power steering was a luxury, high schools had a shop class where students with gritty nails lingered over engines and mingled with friends content to turn wrenches, not pages.

Hampered by spiraling costs, inflexible curricula and a culture that places more emphasis on college-prep courses, districts have cut back on teaching trades in classes like auto shop.

The result, educators say, is that the student who needs a shop class more than a philosophy course may be suffering. And the automotive industry -- and every motorist -- is feeling the consequences.

The latest equipment to work on modern cars entails a large capital investment, so many schools have converted their auto bays to honors classrooms, said Jim Jacobs, associate director of the Community College Research Center at Columbia University.

Students may never know what it's like to work with a wrench, shop teachers say. The scarcity of high school programs has led to a shortage of mechanics, who can command high salaries in the highly technical world of computerized vehicles.

Young mechanics

If school counselors advertised one simple fact, things might change, said Santana High School shop teacher Jacob Bagnell.

A service manager's salary at a reputable dealership can reach six figures, Bagnell said. He complained parents are being sold a bill of goods when school counselors tout college as the only way to go.

"Kids come out of high school with no skills, and then if they don't get a college degree, they have nothing," he said. The handful of students who buzzed around Santana's shop class one recent morning aren't in that group.

They hoisted cars on lifts, removed wheels and welded metal -- heavy duties for teenagers at 7:40 a.m. Such dedication is the marvel of teachers who fight to keep students focused in their academic classes.

"When I come here, I know exactly what I'm doing," said Raymond Butcher, a 17-year-old junior. "This is what feeds my brain."

But fewer students consider auto shop a viable elective nowadays because their core requirements severely limit the number of free periods in the day.

Mike Saavedra, who runs Ramona High School's auto program, said he started a "zero period" before school begins just so he can accommodate over-scheduled students.

With eight bays, a bevy of special equipment and a team of four instructors, Ramona's program has been called the auto shop jewel of the country.

Fewer classes

About half of the county's 66 high schools still have an auto-tech program of some sort, according to Rich Smith, senior director of the San Diego Regional Occupation Program, which helps most high schools run their classes.

In the San Diego Unified School District, five of 16 programs have closed in the past decade.

Hoover High School in City Heights shuttered its program as a result of local residents working with the district to develop a health center. Lincoln High in Lincoln Park, as part of the process to rebuild its campus, will convert its auto shop into a design shop that may work with alternative fuels. And University City High's auto shop shut down about two years ago because administrators had a hard time finding an instructor.

At one time in the Grossmont Unified High School District in East County, all but one of the 12 schools had an auto shop. Now, only Santana, Grossmont, West Hills, El Capitan, Granite Hills, Monte Vista and Valhalla have facilities.

The shop at La Mesa's Helix High was converted to a weight room. El Cajon Valley retooled its auto shop into a firefighter and emergency medical technician training facility.

As is the case with University City, a problem is the shortage of teachers.

"None of our four-year institutions produce teachers in the industrial tech area," said Rob Atterbury, director of the school-to-careers program for San Diego city schools. "San Diego State closed their program six or seven years ago. Long Beach State closed. And Cal State Los Angeles has a remnant of a program."

California has invented a way to hire qualified teachers, however: A mechanic with five years of recent experience can take a special certification course. But becoming a teacher involves a big pay cut.

After a few years, an automotive technician at a car dealership can make more than \$80,000 annually. According to the U.S. Bureau of Labor Statistics, a shortage of 60,000 mechanics nationwide has contributed to the demand for technicians and helped boost salaries.

College training

As a result, community colleges are stepping into territory once the domain of high schools. Colleges like Cuyamaca in El Cajon offer innovative auto-tech programs that mold high school graduates into technicians who are snapped up by the likes of Ford and BMW.

Students work on late-model vehicles in gleaming bays, barely touching the cars without tapping into their onboard computers.

A student taking a final exam tries to diagnose an electrical bug planted in a pickup's computer system.

Knowledge of nuts and bolts is still needed, however.

Pat Garity, Cuyamaca's automotive program coordinator, said the kids who don't have a foundation in basic mechanics, a head start gained in high school, can get lost. Eliminating high school programs means that students come in without the fundamentals, Garity said.

Knowing how to change oil -- the kind of basic skill a student can pick up in high school -- goes a long way in helping prospective mechanics learn more complicated tasks, he said.

But more and more his students are starting from zero, he said.

So post-secondary schools are filling the gap left from the dearth of high school auto shop classes.

Some community colleges offer an associate's degree in automotive technology that is open to high school students. It is this "kind of sharing relationship" that allows high schoolers to make contact with dealerships, Jacobs said.

Turning wrenches

While high school shop classes can prime students for high-paying automotive jobs, they also tend to bestow a fundamental understanding of everyday life, shop teachers say.

Bagnell has seen his shop class students flourish with the skills and the tools many people use to make a living.

"You grab a 13-millimeter wrench 100 times you know what it is," he said. "Ask another kid and they'll tell you what 13 millimeters is, but they don't know if it's this big, or this big," Bagnell said, sweeping his arms wide.

Twenty years ago, students graduated with a taste of what a trade might be like, said Dick Boden, the auto-tech teacher at West Hills High in Santee.

"Your neighborhood school now is judged on SAT scores and on kids going to college," he said. "And if you have a school where it's basically hands-on, the community doesn't look very highly on that particular school."

Experts say parents who foist pie-in-the-sky college aspirations on their children sometimes equate manual labor to failure in life.

"If you ask most people 'Do you want your son to be an auto mechanic or brain surgeon?' Well, most people are going to say brain surgeon," said Tony Molla, spokesman for the National Institute for Automotive Service Excellence, a Leesburg, Va.-based organization that certifies technicians. "But the bottom line is most people don't have the skills to become a brain surgeon."

If going to college is hard for some students, going against the grain is harder, especially in high school where conformity is generally the rule and the desire to please parents runs deep.

"My mom always told me, 'Do what your heart wants,' " Butcher said, standing by his dismantled Ford pickup. "I know college isn't for me. There are students out there that could be great at this, but they are too afraid of what their parents will say.

"They don't want to take the chance."

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1. Ivan Castaneda watched instructor Doug Nephew work on a minivan at Santana High School's auto class. "Kids come out of high school with no skills, and then if they don't get a college degree, they have nothing," shop teacher Jacob Bagnell said. 2. Two cars sat in the automotive bays at Santana High School. Fewer students consider auto shop a viable elective because core requirements limit the number of free periods in the day. (A-6) 3. Santana High School's shop teacher, Jacob Bagnell, said parents are sold a bill of goods when school counselors tout college as the only way to go. (A-6) 1,2,3. John Gastaldo / Union-Tribune photos
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