

TIME

Monday, May. 14, 2012

Learning That Works

By Joe Klein

Clyde McBride is one of those everyday saints who, without much fanfare, go about the work of changing, and sometimes saving, the lives of children. He teaches agricultural science on the Navajo reservation in Kayenta, Ariz. He's a memorable-looking fellow, with his cowboy hat, horsehide tie and a body like a giant sack of flour perched on tiny toothpick legs. His most notable characteristic, though, is his persistence. When a new school superintendent arrived in town a few years ago, McBride parked himself on the guy's doorstep. "He came in and gave me the 'I have a dream' speech," says superintendent Harry Martin. "I told him I'd think about it, but he wouldn't let me think about it. He was bugging me three, four times a week about it."

McBride's dream was a state-of-the-art agricultural-sciences building with two veterinary operating theaters--one for small animals and one for large ones--to train Navajo kids to be veterinary aides and technicians and perhaps even to start a few of them down the road to becoming veterinarians. "I thought it was a waste of money and time," Martin told me. "I'm an old English teacher. I was very skeptical about vocational education. We needed to be drilling them on basic skills. But McBride said he'd make a believer out of me. And he did."

Two years later, with the \$2.4 million agricultural- and technical-sciences building up and running, Martin says, "It's without doubt the best program we have. It's an alternative way to teach them math, science and reading. They love it. They're attentive, working hard, hands on." McBride imports veterinarians from around the country to visit the reservation and work with the 226 students, who assist in both operating theaters, prepping animals for surgery and learning how to suture, draw blood and give injections. The veterinary clinic has become a valued resource on the reservation, but more than that, the academic results have been spectacular. "Nearly every one of these kids passed the state comprehensive test we give to 17-year-olds in Arizona," Martin told me. "Less than about 40% of my non-vocational-education students passed."

Vocational education used to be where you sent the dumb kids or the supposed misfits who weren't suited for classroom learning. It began to fall out of fashion about 40 years ago, in part because it became a civil rights issue: voc-ed was seen as a form of segregation, a convenient dumping ground for minority kids in Northern cities. "That was a real problem," former New York City schools chancellor Joel Klein told me. "And the voc-ed programs were pretty awful. They weren't training the kids for specific jobs or for certified skills. It really was a waste of time and money."

Unfortunately, the education establishment's response to the voc-ed problem only made things worse. Over time, it morphed into the theology that every child should go to college (a four-year liberal-arts college at that) and therefore every child should be required to pursue a college-prep course in high school. The results have been awful. High school dropout rates continue to be a national embarrassment. And most high school graduates are not prepared for the world of work. The unemployment rate for recent high school graduates who are not in school is a stratospheric 33%. The results for even those who go on to higher education are brutal: four-year colleges graduate only about 40% of the students who start them, and two-year community colleges graduate less than that, about 23%. "College for everyone has become a matter of political correctness," says Diane Ravitch, a professor of education at New York University. "But according to the Bureau of Labor Statistics, less than a quarter of new job openings will require a bachelor of arts degree. We're not training our students for the jobs that actually exist." Meanwhile, the U.S. has begun to run out of welders, glaziers and auto mechanics--the people who actually keep the place running.

In Arizona and more than a few other states, that is beginning to change. Indeed, the old notion of vocational education has been stood on its head. It's now called career and technical education (CTE), and it has become a pathway that even some college-bound advanced-placement students are pursuing. About 27% of the students in Arizona opt for the tech-ed path, and they are more likely to score higher on the state's aptitude tests, graduate from high school and go on to higher education than those who don't. "It's not rocket science," says Sally Downey, superintendent of the spectacular East Valley Institute of Technology in Mesa, Ariz., 98.5% of whose students graduate from high school. "It's just finding something they like and teaching it to them with rigor." Actually, it's a bit more than that: it's developing training programs that lead to jobs or recognized certification, often in partnership with local businesses. Auto shop at East Valley, for example, looks a lot different from the old jalopy that kids in my high school used to work on. There are 40 late-model cars and the latest in diagnostic equipment, donated by Phoenix auto dealers, who

are desperate for trained technicians. "If you can master the computer-science and electronic components," Downey says, "you can make over \$100,000 a year as an auto mechanic."

Arizona has another, rather unusual advantage. Its state education superintendent, John Huppenthal, went to high school in Tucson on the voc-ed track. "It was considered the path for losers, but I didn't know any better," says Huppenthal, a Republican who was elected to the statewide post. "I came from a family of machinists. I didn't know anybody who'd gone to college, and I was happy in wood shop. I remember making a chess set, a very complicated project that really made mathematics come alive for me." He also happened to be a state-champion wrestler with pretty good test scores, and his coach encouraged him to study engineering at Northern Arizona University. "I really believe that some form of CTE is essential for a world-class education," he says. "Most students respond better to a three-dimensional learning process. It's easier to learn engineering by actually building a house--which my family did when I was a kid, by the way--than sitting in a classroom figuring out the process in the abstract. Some students can respond to two-dimensional learning, but most respond better when it's hands on. Every surgeon needs to know how to sew, saw and drill."

Precise statistics are sparse; it's difficult to keep track of students after they leave high school. But Carolyn Warner, a former Arizona schools chancellor, says tech-track students "are more focused, so they're more likely to graduate from two- and four-year colleges. Those who graduate from high school with a certificate technical expertise in a field like auto repair or welding are certainly more likely to find jobs."

Still, Huppenthal finds vocational school is a tough sell to the state's education establishment. "It doesn't have the prestige of a college-prep course," he says, "and it costs a lot more than two-dimensional education to do it right." Traditionally, Democrats have tended to be opposed on ideological grounds. They're the strongest believers in college for everyone. Republicans are reluctant to spend the money on state-of-the-art equipment like the veterinary center on the Navajo reservation, although some concede that CTE programs that prepare students for actual jobs are a good idea. "It's like walking in a hurricane," says Huppenthal. "You know where you want to be going, but the winds keep pushing you off course."

But CTE is beginning to produce its own weather systems--human tornadoes like McBride and Downey, the superintendent at East Valley, who is smart and passionate and extremely pushy, constantly working the business community in Phoenix for help in starting training programs. There are 38 programs on her campus, with more coming. There are firefighter, police and EMT programs; a state-of-the-art kitchen for culinary-services training; and welding (which can pay \$48 per hour), aeronautics, radio-station, marketing and massage-therapy instruction. ("We have a lot of resorts around here," Downey explains, "and our students often work part time as masseurs to earn money for college.") Almost all of these courses lead to professional certificates in addition to high school diplomas, and many of the students are trained by employers for needed technical specialties. None of her 3,200 students are full time. They spend half a day, usually afternoons, at East Valley and receive academic training at 35 different home high schools in the mornings.

"Look at this," Downey says as she shows me a fully stocked medical laboratory. "We got \$1.5 million from Veterans Affairs to run a program for surgical assistants, and they gave us a teacher to teach it." The premedical and -nursing students here are dressed in scrubs. Downey barges into a classroom and begins polling the students. "How many of you are going on to some form of higher education?" Almost everyone's hand goes up. "How many of you are taking advanced-placement programs in your home high schools?" A scattering of hands. "How many of you have had to make sacrifices to come here?" Again, a forest of hands. Most of the sacrifices involve hours of travel and having to give up extracurricular activities. "And how many of you were discouraged from doing this by your local high schools?" About half. The home high schools tend to have the standard biases against vocational education--that it's a waste of time, that it takes away from the academic experience.

"The public school system also has a civic purpose," says Jonathan Zimmerman, an education historian at New York University, citing a common academic argument against vocational education. "You're not just preparing people to work. You're preparing people to be citizens. In a democracy, you need citizens who can think critically." But people with jobs, especially skilled jobs, tend to be better citizens than those without them. And the teamwork involved in the training programs at East Valley and on the Navajo reservation tends to help create a sense of community. "In my home high school, you're sitting in a room with 30 other students who don't care, trying to pay attention to a teacher who doesn't care," says Aaron Pietryga, who is training to become a firefighter. "But [East Valley] is like my family. Most of the kids at my home school don't have any idea what I'm doing in the

afternoon, and when I explain it to them, they say, 'Wow, you're doing all that cool stuff, and you're going to college. Why didn't I know about that?'"

On a recent chilly morning at the Navajo reservation, McBride was giving Huppenthal and me a hands-on tour of his veterinary facility. Husband-and-wife veterinarians from Pittsburgh had volunteered their services for a few days and were spaying a dog in the small-animal operating theater, with the help of students in blue surgical scrubs. "They're very good," says Sharon Wirtz, one of the vets. "They have an exceptional feel for this, especially with the larger animals," like sheep and horses. Students were suturing bananas and injecting oranges with red dye for practice. Recently a pack of wild dogs attacked some sheep on the reservation, and McBride took some students to care for them. "Some of these kids suture better than I do," he says. "It brings tears to my eyes."

But his real triumph wasn't in teaching the Navajo the technical skills. These students also knew how to make an impression; they had learned the soft skills necessary to be good employees. They looked you in the eye, introduced themselves and shook your hand (which was universally true at East Valley as well). This was striking, given the history of depression and despair on the reservation. "These kids are thirsty. All you've got to do," McBride says, eyes brimming, "is let them drink."