



### **Not Your Father's Shop Class: Fostering Future Woodworkers**

**By Denise Williams | Channel Connection**

In yet another sign of how times have changed, it was social media that brought educator Mark Smith together with Aetna Building Solutions – the company he credits with ultimately saving his high school industrial technology program.

Jon Minnaert, president of the Maywood, Illinois-based building materials distributor, was on the hunt for just such a program to add to the 'Aetna Gives Back' charitable division. The good-works initiative already provides scholarships to local colleges, supports area youth teams and organizations, and provides giveaways during the holidays, among other campaigns. While all worthy causes, there was a strong desire to extend the company's generosity in a way that would directly impact its core industry – preferably at the local level.

Scrolling one day on LinkedIn, one of a number of social media platforms where Smith shares his students' undertakings at Reed-Custer High School in Braidwood, Minnaert stumbled on exactly what he was looking for.

### **The Evolution of Shop Class**

Back in 2000, under Smith's direction and foresight, the Shiloh campus in Hume, Illinois, became one of the first high schools in the United States to install a full-sized Thermwood CNC router. In 2016, Smith began building a computer integrated manufacturing facility with another Thermwood CNC router at the center of Reed-Custer's industrial technology program. The purchase was a game-changer for the

program, which had suffered a plight shared by similar programs across the nation. Over recent decades, Smith explains, the ties between industry and education had unraveled quite a bit, with many career and technical education (CTE) classes taking on more of a recreational feel as a result. Adding the CNC router, which he describes as basically a robot, represented the first step in a recalibration of the program's focus and purpose. The learning environment naturally began to gravitate toward engineering software such as AutoCAD, MasterCAD, eCabinets, Microvellum, Cabinetvision, Carveco and more. Additional cutting-edge equipment followed, including an automated edge bander, 3-D printers, a CNC laser, a computer lab and devices to help move materials around. Collectively, the technologies would change not only the way his students built products but what they crafted.

As the "hobby" culture faded, Smith seized the opportunity to orient his curriculum to better reflect what was actually happening in industry. "When you're a program that's emulating what industry's doing," he remarks, "now suddenly you're doing things that industry respects, the community respects, the kids respect, the administration respects and the school board respects. No offense to people building birdhouses or things like that, but we're not building birdhouses here at Reed-Custer High School."

What they do build, as Minnaert was soon to discover, is kitchen cabinets, which they then install in an actual home at a minimal cost. And what that also does, Smith adds, is give students a real-life taste of a career in woodworking. That's just one reason, the teacher emphasizes, why industry involvement is so crucial. "Between what industry is doing and how education is changing and then, thirdly, getting industry and education to work together," he continues, "we're really seeing a revival, a resurrection, a renaissance movement of the trades."

This reawakening is not only bringing back interest in woodworking, Smith observes, but drawing it from untapped corners. "There was a time when, if you wanted to work in the trades, you had to be pretty strong," he recalls. The nature of the work has become less physical with the technological advances, and Smith believes that's making it more appealing to a much broader base of participant – including, but certainly not limited to, female students.



*Pictured: Reed-Custer High School's Mark Smith visits one of his industrial technology students, Makayla Wilkins, at her part-time cabinet-making job.*

Not all will head off to college when they graduate, some due to circumstances but others by choice. Smith believes the woodworking industry offers a solid career pathway for many of them, if only companies promote the selling points and opportunities in a timely and effective fashion. That wasn't really the case during his high school years, he remembers; otherwise he may have gone in a different direction professionally – straight from commencement to a woodworking job. Fortunately, the next best thing for him to actually working in the industry is preparing kids to work in the industry; either way makes him happy. But others for whom college may not be a good fit might not be so lucky.

For Smith, the memory drives home the importance of companies getting involved with young people while they're still considering their futures. By the same token, Minnaert recognizes programs like Reed-Custer's for their potential for industry participants to win over new entrants to the workforce. When the two movements intersect, it creates the prospect of a promising career for students skipping the four-year college experience and a coup for wood manufacturing customers – some of which are hurting for new talent – and even distributors themselves.

## A Meeting of the Minds

Minnaert was first intrigued, then impressed, by the program at Reed-Custer. He reached out in late 2020, although the ongoing COVID-19 crisis put his visit to the school on hold until later the following year. The eventual meeting between the industry exec, teacher and his principal turned out to be well worth the wait, however. Minnaert recalls how Smith mistakenly thought Aetna was simply trying to sell him some plywood, but the company leader assured he was only there to help. “I told him, ‘You’re doing some pretty worthwhile things in our industry – there’s not a lot of high schools that do this anymore,’” he says. “You’re creating excitement and hopefully the springboard to get them into our industry. Who knows? There could be a future Aetna salesperson or future Aetna leader in there somewhere, in your shop.”

Smith, meanwhile, admits to be pleasantly surprised to learn that Aetna actually wanted to donate materials to his class and students. He and Minnaert kept the lines of communication open, and Aetna is now in its third year of gifting product to Reed-Custer. It’s just the kind of collaboration the nonprofit Wood Industry Resource Collaborative envisions, as described in a previous article. And, according to Smith, it rescued his program from an uncertain future.

“I was wondering how my students were going to afford their projects, when our panel products were \$60 a foot before and now some cost as much as \$180,” recalls Smith, who says he is unsure what would’ve happened if not for Aetna’s support. That’s no longer a concern, now that the class doesn’t have to pay for the plywood and hardwood it needs. “I was worried we were going to have to start building birdhouses,” Smith suggests facetiously.

Although he wasn’t even aware that Reed-Custer’s curriculum was facing dire straits, Minnaert is thrilled by the idea that Aetna’s help made a difference. “That’s what we wanted to do,” he says enthusiastically, and he encourages peer companies to do their part, too, if they aren’t already. “These schools are in every one of our cities,” he points out. “I don’t know how many, but they’re in every one of them.”

Smith offers some perspective: the number of industrial arts program at the high school level is, conservatively speaking, in the neighborhood of about 5,000 nationwide, according to him. That’s down, he notes, from approximately 50,000 woodworking programs in high schools during the 1980s. The statistic only adds to the argument for industry to do more. “The wood industry has had such a strong foothold at the high school level – although it isn’t as strong today, it still has a presence – and to let that go would be a colossal mistake,” he opines. “It would be a shame not to get involved and maintain that strategic advantage for the industry.”

Companies can be supporters in a wide range of ways, Smith notes, before naming several: technical assistance, mentoring, professional guidance through career fairs, funding for students’ trade show attendance, product donations and more. “Nothing says this industry has opportunities for students more than industry being involved with your program and supporting you in all these ways,” he declares. In fact, Smith has a list of 32 things industry people can do to participate at the high school level “to help affect in a positive manner how that school district views their program and the industry, in hopes of maintaining a presence that might already be there or developing a presence that isn’t there.” In brief remarks at NBMDA’s upcoming conference, he’ll share some of those very strategies with the audience.

**Don't miss Mark Smith as he shares his insights on how distributors can partner with local high schools at the NBMDA Member Meeting on November 2 during the 2022 NBMDA Annual Convention in Chicago.**