Braidwood students learn real world skills in RCHS industrial technology class

Business-school partnerships an important lesson for industrial tech students

By Jeanne Millsap

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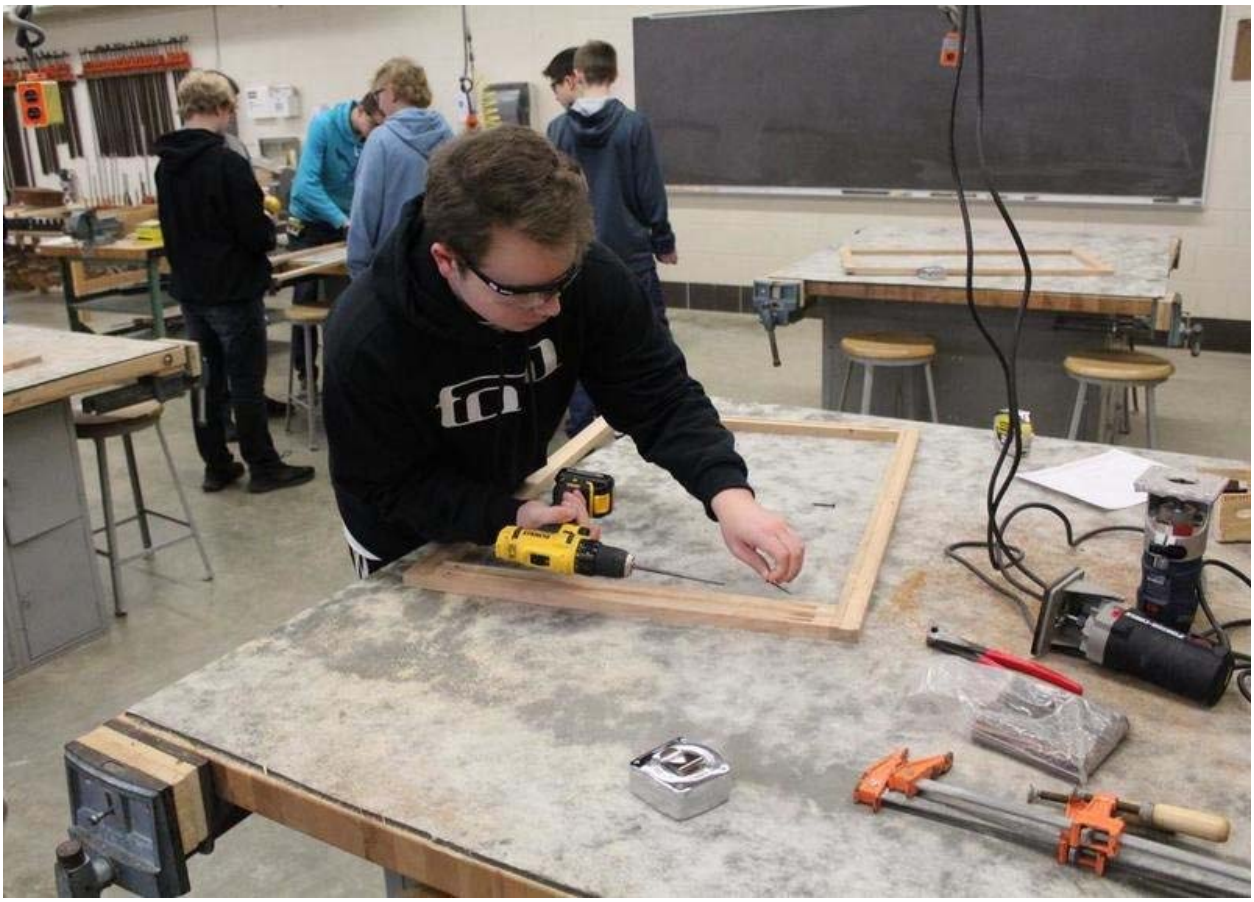

Brandon Carlo working on cabinet face frame

There was a time when many high school woodworking, metalworking and other industrial arts courses were considered mostly hobby classes. Students might continue the work for their livelihoods after graduation, but business skills were rarely included in their classes.

Today, at least in Mark Smith's industrial technology classes at Reed-Custer High School in Braidwood, students learn business acumen, industry standards, and how to network with professionals, right alongside carpentry, engineering, architectural design and how to use tools and machinery. Businesses court them for jobs even before they graduate. "We have companies calling for our students all the time," Smith said. "We just had a company come up from Florida who want to offer internships for our students at $15 to $20 an hour. They'll pay for their housing, and they'll give them a great experience over the summer." Some of his students took advantage of a similar internship in Nashville last summer. Most of these business contacts are developed by Smith, with the knowledge that school-business

partnerships are a win-win situation. He said he is happy to have grown these relationships over the years. They benefit his students as they seek training or jobs, and businesses benefit by having knowledgeable, trained applicants who can hit the ground running. Industry leaders visit his classes and talk to students, and his students take field trips to their facilities. Other business partners give technical support to the classes and others donate equipment or dollars. The company Taylor Guitars recently donated $20,000 worth of guitar parts, and the Association of Woodworking and Furnishing Suppliers, AWFS, donated $1,700 for students to travel to trade shows. They are among a list of many businesses that help the Reed-Custer classes. “We have a company in Texas that is doing a fundraiser for us,” Smith said, “to purchase a piece of digital fence equipment.” The piece of machinery is commonly used in industry, but not so much in high schools.

Reed-Custer’s industrial technology classes include CAD 1, 2, and 3; STEM 1 and 2; Production 1 and 2; and CAD/CAM 1 and 2. Smith explained that CAD, computer-assisted design, involves making blueprints using a computer. Most drafting is done on computers today, he said, rather than on drafting boards. One of his former students is studying engineering at an Illinois university and told Smith he was the only student in his class who knew CAD. The other students had to learn the program on their own time. Students design and build acoustic or electric guitars in the Reed-Custer STEM classes.

In the production classes, they build things like cabinets and furniture. This semester, they are building cabinets on commission for a Morris family. Students in the class built and installed kitchen cabinets for the same family a while back. “They liked them so much they asked us to build six more for them,” Smith said. “We’re going to turn their refrigerator into a built-in situation with cabinets all around it, and we’re going to replace all the cabinets in the laundry room and one in the bathroom.” Gabriel Morris, a sophomore in this semester’s Production Technology 2 class, said he took Production 1 last semester and enjoyed it, so he enrolled in the next one. “I love working with my hands and with wood,” he said. “I had heard that the second class had more of a leadership role and that we could do more on our own.” Morris grew up helping his father do carpentry and is considering an eventual career in manufacturing engineering. He hopes to be able to take all of Smith’s classes before he graduates. Sophomore John Selock enjoys the hands-on aspect of the industrial technology classes, as well. “You pick up more when you do it that way,” he said. “There’s something different and satisfying about learning something hands-on.” His favorite part of the production classes is seeing the finished product that he and his classmates have been working on all semester. Selock hopes to go into the trades for Local 150 after graduation. Sophomore Brandon Carlo, also taking Production 2, already landed a job at a local woodworking business, building bathroom and kitchen cabinets and doorways. He hopes to go into welding or programming CNC machines after graduation.

Students in the classes do well in national competitions, as well. Former Reed-Custer industrial technology student Chandler Norton earned 2nd place in the national AWFS Trade Show in Las Vegas last summer for a gaming chair he designed and built.