

April 2005 Cover Story

Class in session

Wood processing industry puts emphasis on education

By Brooke Baldwin Wisdom

Education based on industry need

High school WoodLINKS curriculum brings relevancy to wood shop

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Due to lowering enrollment, shrinking budgets and lack of community and local school board support, high school industrial and technological studies are suffering under the misconception of their being antiquated and unnecessary programs. Shiloh High School, a WoodLINKS program in Hume, Illinois, is proving that perception wrong. An energetic atmosphere has infused a curriculum of engineering design, problem solving and analytical skills, and the outcome is a relevant course of study that produces students interested in the manufacturing process. “Due to the complexity of society and the advancement of technology, a student’s preparation for the workforce is best achieved by providing a foundation of practical education based on the knowledge and skills needed by businesses, industries and communities in our society,” says Mark Smith, teacher and director of the WoodLINKS program at Shiloh High School. WoodLINKS is an industry/education partnership delivering an innovative curriculum, lesson plans, training and testing in wood processing to high schools and colleges.

To help with funding, Smith has developed a well-oiled marketing program to promote Shiloh’s program both locally and nationally. Shiloh High School runs a school-based enterprise in its production class, building kitchen cabinets for people around the state. The program has raised more than \$30,000 this way. The students also create working drawings for local businesses with AutoCAD and do CNC work on their Thermwood CNC router for local and national industry.

“I usually have no trouble attracting students to the program because we do a lot of exciting things,” says Smith. “For instance, we have a summer program where I hire students to work with me, and we build items for the school like podiums, cabinetry, shelving, etc. We only have about 120 students in our high school, but about 60 take our classes. We have many students that go on to engineering or designing with CAD. We probably have at least six students each year who actually go into the wood industry or related field.”

Smith credits his association with the WoodLINKS program for the wood processing industry’s generosity and interest. “WoodLINKS is a recognizable name in the industry, and that name has opened doors for me that I could not have opened on my own,” he notes. “Those open doors are to CEOs and presidents in the industry, not just the person working the front desk. Other opportunities have been educational experiences for my

students, summer camps that we attend and student design contests. When I got involved with WoodLINKS, the heavens opened as far as donations are concerned. By the end of this year, we'll have \$80,000 worth of materials and equipment donated to our program. A big part of that is Microvellum's donation of a very large software package this year."

Shiloh's technology lab is also armed with a Thermwood CNC router, a CNC point-to-point machine and digital measuring tools on many of its large pieces of equipment. WoodLINE USA gives Shiloh all the router bits it needs and Onsrud Cutter donates all the CNC tooling needed on a yearly basis. In the computer lab, AutoCAD, MasterCAM Router, MasterCAM Mill, MasterCAM Art, ArtCAM, Mechanical Desktop, eCabinets, Esprit and Studio Viz are used.

The students fund raise at the International Wood Manufacturing and Furnishings Suppliers Show (IWF) and the Association of Wood Manufacturing and Furnishings Suppliers Show® (AWFS®). This part of fundraising has generated about \$120,000 worth of tools, materials, services, training, equipment, tooling and software in three years.

"WoodLINKS has given us visibility that we haven't had before, while putting us in contact with industry leaders and education leaders," says Smith "WoodLINKS also has put me in contact with the press. A number of articles has been written, and that's opened doors of opportunity for my students that otherwise wouldn't be there. We have companies that call to talk about joint ventures." One of the joint ventures we are currently working on is wooden sunglasses. A company in the southern part of the United States contacted us last summer after seeing an article about us in a wood industry publication. We design, cut, steam bend, and finish coat the frames and temple pieces, and then mail them out.

Smith has high hopes for the WoodLINKS program's future at Shiloh. A local high school is going to start sending their Industrial Technology students to us next year. "I hope to put an addition on our shop," he says. "It's currently about half of what it needs to be with our kitchen cabinets, student projects and the things we are doing for industry sitting around. With all of our equipment donations, we have to turn things away now because we don't have room. We also need more industry right here in our area. We are sending students out the door who have a better understanding of manufacturing, but are reluctant to move to another location. If we had local industry, we sure could feed it."

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