

# HIGH-TECH *in the* classroom

*Illinois students prepare for high-tech woodworking careers.*

**W**hile some people may think school woodshop curriculum still focuses on how to build birdhouses or a recipe holder for Mom, teacher Mark Smith's class at Shiloh High School in Hume, IL, is preparing for the real world of woodworking, including instruction in operating CNC machinery.

Smith, one of the most progressive teachers involved in the WoodLINKS-US program, stays well connected to industry needs and current technology. He has been part of teacher delegations to the IWF and Anaheim Fair tradeshows through WoodLINKS and aggressive about maintaining industry contacts to help him provide students with the most up-to-date resources.

Case-in-point is the addition of carving into the CNC manufacturing curriculum this spring, using ArtCAM V6 from Delcam. "I created models to be used with existing Freshman/Sophomore projects to expose them to CNC carving," Smith says. "As students progress through my program, not only do they learn how to use the tools out in the shop, they also learn how to use a variety of CAD and CAD/CAM computer software programs for designing purposes. Now they will have the opportunity to learn how to generate their own models.

"Typically, students who progress through my Industrial Technology Program create their own Senior project from start to finish. They come up with the idea, do all the research necessary to make educated decisions about design, materials, tools, jig work, safety, material handling, machining, combining and finishing processes. They now have the option of using ArtCAM to design 'value-added' carvings to their projects," he adds.

One student, senior (???) Joe Harbaugh, took immediate advantage of the new software. Using artwork provided by Delcam, with tooling provided by Onsrud Cutter and Woodline USA on the school's Thermwood CNC router, Harbaugh designed and built an impressive coffee table. The long side aprons have a grapevine relief carving.

"Joe is very proud of his project and wants everyone to see it," says Smith, showing a little bit of pride himself. 📷



**Harbaugh shows off the coffee table apron which was carved on the school's Thermwood CNC router using ArtCAM V6 software from Delcam.**



**Shiloh High School student Joe Harbaugh shows off the coffee table he designed and built, incorporating CNC technology (detail shown at right).**

