

## **Enrichment Activities**

Enhance your students' learning and extend their knowledge of the subject with the enrichment activities below. Each activity teaches students about another aspect of the woodworking trade and enables them to practice their research, reading, writing, and discussion skills.

### **History of Woodworking**

For students to understand the present and future of the cabinetry and woodworking trade (or any trade they may choose to pursue), it's important for them to understand the significance of historical trends and how they relate to the workplace and marketplace. For example, the tools and methods used to manufacture furniture were significantly advanced by the Industrial Revolution, the use of mass-production methods, and, in recent years, the use of computer-aided design and manufacturing software.

Discuss with students the historical changes that have occurred in the woodworking industry over time. These changes could include:

- The use of tools, materials, and methods
- The use of mass-produced products vs. custom-made products
- Broad changes in economic conditions in different countries at different times
- Changes in style

Have students pick one aspect of the woodworking trade and do a research project on how it has changed in the past and what it means for the future. The project can consist of:

- Creating a timeline on the development of woodworking tools
- Creating a visual presentation of a particular style of furniture
- Creating a graph showing how the woodworking industry relates to other industries, such as the lumber, hardware, and construction industries
- Interviewing a local tradesperson in the woodworking industry about what changes have taken place

### **Tool Care and Maintenance**

Saws, lathes, and grinders are tools of the trade in the woodworking industry. Just as important as the knowledge of how to use tools safely is the proper care and maintenance of tools. A good way to teach students respect for tools and their different functions is to teach them how to care for tools.

As you demonstrate the use of different types of tools to students, show them how to store and maintain them as well. At the end of the term, have them write a brief essay on how to care for tools, distinguishing between hand tools, power tools, and pneumatic tools. You can also quiz them by showing them different types of tools and asking them to identify each type of tool and the proper way to store and maintain it.

### **Cabinet Building Standards**

Like other areas of the construction trade, cabinetmaking has to conform to a set of building standards. These standards vary from state to state.

So students understand that there are objective standards they must conform to, assign them to go on the Internet or call a local government office to find out what the local or state

standards/codes are for their area. Also have them investigate any national standards that may apply, such as the standards stated in the Manual of Millwork.

### **32mm Cabinetmaking**

Frameless cabinet construction is often referred to as "European Cabinetry" because it originated in Europe. A common method for constructing frameless cabinets is the 32mm Method. With the 32mm Method, system holes (often 5mm) are spaced 32 millimeters apart. The holes make construction and installation of hardware—such as for doors, drawers, and selves—simple, uniform, and easy.

Have students research the 32mm Method, either by going on the Internet or contacting a local cabinetmaking or furniture making business. Have them draw a diagram illustrating the 32mm Method and write a brief essay describing the advantages of the 32 mm Method or discuss the advantages in class.