
Woodworking With Children

TEXT AND PHOTOS BY PAUL SELLERS

We live in a world saturated with high-tech gadgets and mechanical devices that tend to displace hands-on learning. Most children today, therefore, fail to acquire many of the foundational skills and abilities that they once would have practiced in the formative years of their development. The modern-day prevalence of machines for home workshop use has further discouraged younger children from developing these essential hand skills. Yet during these early years, between ages 6-14, children can benefit greatly from the kind of hands-on learning that is taught through working with hand tools, and craftsmen who want to pass on their skills to the next generation should take advantage of this period of time to introduce children to the lifelong pleasures of woodworking.

I first started woodworking during my early teen years, back in the 1960s. At fifteen I began formal training as an apprentice joiner with an English joinery company, and as a result of what I learned in those formative years, hand-tool methods and techniques still remain an integral part of my craft. Though I use both machine and hand-tool methods for working wood, I find hand-tool woodworking more fulfilling because of its unequalled versatility.

I'm also convinced that developing woodworking skills through hand-tool methods gives the best foundational and elementary understanding of the craft. The most important prerequisite for craftsmanship is a thorough understanding of the materials, the tools, the craftsman's ability and the limitations inherent in all three. So, to teach children woodworking you must consider their maturity, the equipment they use, and what you want them to learn.

There are more benefits to using hand tools than most people think. Using hand tool methods allows children to begin woodworking as early as six or seven years



Hand-tool woodworking can be an excellent and important learning experience for young children. The author's seven-year-old son Abraham uses a gouge and mallet to hollow out the bowl of a wooden spoon.

of age. Hand work requires surprisingly few tools and only a small workspace. It is essential that you have some type of solid bench structure to work on. I use a bench

with a good vise, but to begin you can work almost as well on a heavy table or a picnic bench using wood clamps to hold the piece secure while you work. Working



LIST OF TOOLS NEEDED:

Spokeshave, flat-bottomed; Round scraper; Straight scraper; Coping saw; Rasp, four-in-hand; Handsaw; Mallet; Gouge, (#7 or #8 sweep, 1-1/4"–1-1/2" wide).

PROJECT ONE: A CUTTING BOARD

Step 1

Begin your cutting board by using a coping saw to cut the shape from a 1" x 8" x 16" long blank.

Step 2

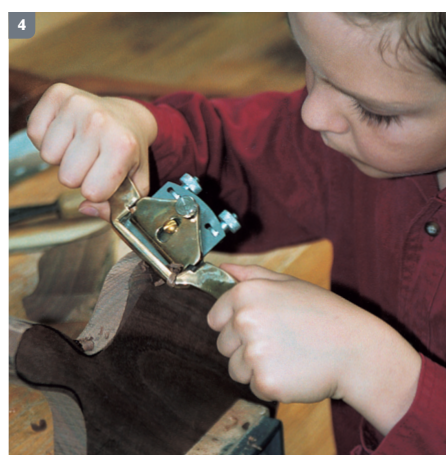
Use the spokeshave to shape and round the edges of the cutting board. Begin removing the corners with straight, long cuts by holding the spokeshave at a 45° angle and pushing it plane-like along the corners of the board to create a flat about 3/8" wide. Now alter the angle of your spokeshave to remove both the hard corners.

Step 3

Work all the way around the edge of the board, switching from the spokeshave to the rasp as needed.

Step 4

Repeat on all the subsequent hard edges until they feel reasonably round. With all the edges rounded over, you can now sand with 120- then 220-grit sandpaper. With the board sanded, you are now ready to oil with canola or olive oil.



the wood with hand tools stimulates and trains all the senses of touch, taste, sight, sound, and smell in a positive way. You need no special ear, mouth or nose protection when you use these simple woodworking methods, although I suggest us-

ing protective glasses to protect the eyes from a flying chip from the gouge.

I have chosen some simple projects that have encouraged my own children in their formative years. These projects are ideal for developing hand-eye coordination and will

build a growing confidence as they practice their skills. Making a cutting board, a wooden spoon, or a walking staff requires only a few select hand tools, and all of these projects can be completed in a few hours. The hand tools needed are relatively inexpensive considering that they will last for many years even if used every day. They are also safe for children to use, given, of course, parental guidance and adequate supervision. You should probably wait to teach children machine methods until they are in their later teen years. Although machines require less effort and skill, accidents are significantly more serious and are often life-threatening.



PROJECT TWO: A WALKING STAFF

Step 1

You will need a blank 1" x 3" x 48" long. Cut out the handle shape with the coping saw or, if you have one, a bowsaw.

Step 2

Rip down the long section with a handsaw.

Step 3

Spokeshave all the corners just as you did with the cutting board.

Step 4

Sand smooth with a 120- and 220-grit paper.

Step 5

Finish with oil or some resistant finish such as polyurethane.

Prudence would require that you wait until children are physically and mentally mature enough to use them. My own sons developed hand skills first, and though the older ones now use machines for dimensioning wood, their hand skills make up the most significant part of their craft. This gives them the increased versatility they need to make fine, handcrafted pieces.

As you work through these projects you will realize that the techniques used for each project are very similar. The basic skills being taught are shaping skills, which we use in dozens of woodworking projects such as scalloped chair seats, chair spindles,

ladder rungs, carriage shafts, chair rockers and arms, rocking horses and arched rails for furniture. They are also preliminary steps to making musical instruments. For instance, carving the bowl and shaping the back of the spoon require the same techniques used in carving a violin, a cello or a stand-up bass. Carving the handle of the spoon develops the skills required for carving the neck of a guitar. Even at this elementary level of splitting, scalloping, carving, shaving and such, children begin to learn about the characteristics, nature and properties of the wood itself, with all its idiosyncrasies.

You can use any wood. Hardwoods such as cherry, maple and ash work well, but simple pine is ideal for beginning projects and is also readily available from the lumber store in town.

Only five hand tools are needed to make the walking staff and the cutting board: these are a spokeshave (flat-bottomed), coping saw, a 1" chisel, handsaw, and a 4-in-1 rasp. For making the spoon, three additional tools are needed: a mallet, a gouge (a #7 or #8 sweep, 1-1/4" or 1-1/2"), and a shaped scraper. You can buy shaped scrapers or you can make one from a regular flat steel scraper by grinding or filing it



to shape. These seven good quality hand tools will cost you around \$120.

The four-in-one hand rasp has both coarse and smooth cuts on both round and flat faces. We use the coarse round face to rough out the internal corners, and the coarse flat for rounding the external corners. You can actually shape a whole cutting board or walking staff using only the rasp if you don't have a spokeshave. Simply turn the rasp in your hand ac-

cording to the type of cut you need. The coarse cut removes stock quickly while the smoother file cut removes the marks left by the coarse cutting rasp.

It's important that we not only consider the wood and the tools we use, but even more so the children we will teach. Put yourself in the child's place so you can anticipate how he feels and also any possible difficulties that might occur in the early stages. Make sure that you understand the

implications of what you will teach and how you will teach it. Practice and repetition are essential. Children develop basic skills more readily when they work to patterns designed for the purpose of developing those skills, provided the skills being taught are within their physical and mental ability to grasp and they are given sufficient practice time and encouragement to see the project through. To encourage the sense of anticipation and enthusiasm children naturally

PROJECT THREE: A WOODEN SPOON

Steps 1&2

Begin by drawing the spoon shape onto a 1" x 3-1/2" x 15" blank using a black felt-tip pen or a pencil. Use a second pattern to trace the shape of the bowl.

Step 3

Scallop the bowl with the gouge, working from both ends towards the center of the bowl, ending each cut in the center. If you cut the other way, from the center of the bowl out, you will cut into the endgrain and split off chunks where you don't want to.

Step 4

Scrape the scalloped bowl smooth using the scraper. If you don't have a scraper, you can use coarse sandpaper to remove any ridges left by the gouge.

Step 5

Cut the spoon shape from the blank using the coping saw.

Step 6

Shape the back of the spoon with the spokeshave and rasp.

Step 7

Shape the handle until it feels round and comfortable to your grip.

Step 8

Sand over the entire spoon with 120-, then 220-grit sandpaper and oil with canola oil or olive oil.

have when they try something new requires that you have the right equipment and establish the best patterns of teaching to meet their particular need.

It is important to help children develop age-appropriate skills in their formative years. I've said that certain skills can be taught to children at an early age, but it's essential that you realize that children may become frustrated and discouraged if they try something that is beyond their ability

for whatever reason. As an example, most children between the ages of 7-12 generally have difficulty mastering the precision and dexterity they need to accomplish good wood joinery techniques. Even though they may understand the principles being taught, their physical strength, stamina and hand-eye coordination have not yet developed enough to master the techniques. It's important for you and for them to know that the potential lies within them but at this age is simply not yet sufficiently developed for them to be able to perform or master certain skills or tasks.

Children can learn a lot by simply watching you work and are often content to do that for a season, but eventually they will want to try it for themselves. Most of their attempts will be positive experiences, but even negative experiences can be turned around if a child realizes that his struggles show that he's really not ready for the task. For example, a child can watch a craftsman use a plane, understand how to adjust the depth of cut, lateral adjustment and so on, but if he doesn't have the upper body strength to successfully push the plane across the surface of the board, he may believe that he just cannot do it or that it doesn't work rather than recognizing that he's simply not ready for this stage of woodworking. That's why I prefer the spokeshave as the first tool to give to my children. A well-adjusted spokeshave works even for six-year-olds. When I set my spokeshave, I use the same practice craftsmen used before adjustable irons came into being: by setting one side of the iron for a coarse (deep) cut and the opposite side for a fine (shallow) cut, I can move the spokeshave from a lighter to heavier cut without adjusting the iron.

The most significant quality we want to preserve and nurture in children is their enthusiasm to learn. It is this enthusiasm that precedes the sense of discovery and fulfillment they find as the shavings curl from their spokeshave or their fingers glide over the newly finished surface of their work.

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THINGS TO REMEMBER

1. Use the best equipment and tools you can afford. Always make sure the tools are sharp, properly maintained, and correctly adjusted. Dull tools take much more effort to work with and are harder to direct and control. If tools don't work well for any reason, children will naturally assume that the problem lies in them rather than the tool, or they will erroneously believe that hand tools don't work.

2. You are now using ultra sharp tools, so always take care not to cut towards your body. Such small tools can easily puncture your hands, stomach, chest or face. Make it a common practice to always cut away from you. Always keep your hands behind the cutting edge of your tools. Be conscious of others around you when using tools.

3. Consider the child's height. He may need a platform to work from.

4. Keep the work area clean and tidy. Sweep up chips from the bench top and floor area to prevent build-up.

5. Choose straight-grained, defect-free wood. Any wood with knots, wiry grain, rot, cracks and so on should be avoided or cut out. It can be disappointing for children to work through a project and have to abandon it because of defective material.

6. Make sure that you fully understand what you are teaching them. Work through the project yourself before you work with them so that you can anticipate potential problems ahead of time.

7. Consider how much work you are giving them to do. Children soon get discouraged if our enthusiasm for a project is greater than their capacity to complete it.

8. Be prepared to help them with difficult areas of the project. Children may be able to do 90% of the work, but one part of it may be completely beyond their ability. Prepare them beforehand so that they understand that they may need help with certain aspects of the project.

9. Try to consider the individual skill and aptitude of each child you are teaching, regardless of their age. Don't expect them all to be at the same stage. Many considerations affect a child's development.