

Woodworking is a wonderful resource to include in your classroom to support whole-child development. If implemented and supervised correctly, woodworking provides enormous benefits for the children, while outweighing any potential problems. Benefits will include: creates a sense of satisfaction and accomplishment, builds children's self-image, self-esteem, self-confidence and self-sufficiency, utilizes creativity and problem solving skills, fosters imagination, and encourages relationships.

Seven Developmental Stages of Children's Woodworking

Stage 1: Acquaintance with Tools and Wood

An initial exploration of tools and wood. Through a variety of uses the children explore physical characteristics; weight, texture, balance, strength, etc.

Stage 2: Simple Skill Attempts

During this stage, children are able to actively explore the skills relating to the tools. Hammering, sawing, using screw drivers, wood glue, etc.

Stage 3: Simple Constructions

As children become more comfortable with the use of the tools, they begin to attempt projects. They also begin to plan, sequence, problem solve, and create new ideas. For example shapes and other designs are created with multiple pieces.

Stage 4: Refinement

The children continue to explore and gain confidence in the woodworking area by creating projects. They start to build on or add finishing touches to their projects such as sanding, painting, or creating uses.



Stage 5: Functional Construction

During this stage, the projects may become more realistic looking because children intentionally put pieces together to form a shape. This shape or design then has a name and added reality or use.

Stage 6: Decorative Combinations

Children at this stage use their woodworking skills to create something with intention that can be used elsewhere. They plan, collect and choose materials, to then execute their idea.

Stage 7: Emergence of Craft

The skills learned are used both as a functional and symbolic skill. Children will continue to try new ideas and refine existing techniques.

Safety, Safety, & Safety!

Safety is the most important aspect in a woodworking center and must be discussed with the children before and during an activity. Safety goggles and closed toed shoes must be worn at all times (hard hats, gloves, and construction aprons can also be used). First aid kit should be handy in the area in case of accidents. Adult supervision is required whenever tools are being used. Tools should be locked or put away when there is no supervision. Place your workbench in a highly visible area, but away from traffic paths. Limit the number of children in the area at a time (4-6). "Safe as necessary, not safe as possible." "There's two types of accidents: one you need a hug and some cold water, while the other you need an ambulance."



Working with...

Hammers

Materials: Use a 12 oz. claw hammer. The head is for pounding in nails; the claw part is for pulling nails out.

- **Check the hammer before use.** Look for firm attachment of the head to the handle. Also check for splinters, loose wrapping, or other defects in the handle. If the hammer has any defects or is wobbly, do not use it.
- **Get a firm grip on the end of the handle.** Beginners often hold the hammer midway, but it is more energy efficient to grip the handle firmly at the end. You can hold it a bit higher up while you are learning. With practice, you will become more proficient at holding the hammer towards the end, affording yourself more leverage.
- **Hold the top or head of the nail.** If you hold the nail at the bottom and miss, the hammer winds up crushing your finger against the wood.
- **Hit your surface squarely with the hammer.** Hit only with the head of the hammer, not use the handle or the side.
- **Use your whole arm and elbow.** As well as maintaining a good grip, it is important to rely on the strength of your whole arm and elbow and not just your wrist and hand to pound the hammer. Keep a straight wrist and allow the weight of the hammer itself to do the pounding, not your arm.
- **Work in a natural position.** Children should hammer at waist height for the greatest ease and leverage.
- **Place your work against a hard surface.**
- **Check before you swing!** Keep your workspace clear of other objects and check that nobody is standing behind you or too near you when you use the hammer. You need plenty of space to swing the hammer without catching your arm or the hammer on another person or object.
- **One piece at a time.** If a child is wanting to connect pieces of wood, encourage them to first get the nail through the wood first and then put the next piece under.
- **Practice.** Good hammering technique comes from trial and error. You will develop your own technique over time that



Saws

Materials: Use a 12-14 inch crosscut saw

- **Safety! Hold only the handle** and not the blade or the teeth.
- **Create a safe surface to cut.** Before beginning you would want to make sure the surface to be cut is stable. Using a vice or a clamp to secure the wood.
- **Ensure your saw blade is sharp and clean.**
- **Create a line to guide your cut.** The first step to using a hand saw determining exactly where the cut will be made.
- **Start sawing slowly.** Hold the saw such that your wrist, shoulder and the handle of the saw are lined up, and you are not sawing at an angle that feels unnatural. Apply pressure to the saw as you push downward on the cut, but release pressure as you pull the saw back toward yourself.
- **Find your rhythm.** Getting into a steady rhythm as you saw will help you slice through the materials.



Materials and Resources

- PARENTS are always your number one resources. Ask for donations!
- Home Depot, Lowe's, OSH
- Dollar Tree, 99 Cent Store, etc.
- Craigslist, contractors, plumbers, landscapers
- <http://www.trashforteaching.org/>

Helpful Texts:

- Adams, P. & Taylor, M. (1982). *Children's workshops: ideas for carpentry centers.*
- Skeen, P., Garner, A. & Cartwright S. (1984). *Woodworking for young children.* Washington, DC: NAEYC.
- Walker, L. (1982). *Carpentry for children.* New York: The Overlook Press.