There is something about wood that transcends generations. Is it the feeling that you get as you hold it in your hands? Maybe it is the wonderful smell as it is being sawed, a scent that is unique to every type of wood imaginable. It could be the fact that we know that the wood we hold was once part of a majestic tree that towered in the forest, or shaded a backyard in your neighborhood. Whatever the personal connection, many humans love working with wood, no matter if we are thirteen or sixty-three.

Virginia is fortunate to have active and growing wood technology education programs in both public and private school systems across the Commonwealth. These programs teach young, enthusiastic students about every aspect of wood including its physical properties, the multitude of uses for wood and how best to use the resource with minimal waste. Wood technology classes teach students how to plan and build projects and also how to use equipment – both machines driven by electricity and those powered by human energy – in a safe, productive manner.

Wood Technology in Schools

One would expect to find these wood technology programs entrenched in the rural Virginia countryside and not necessarily in Alexandria, Virginia (population 160,000). In this major metropolitan area just outside of Washington, DC, two very dedicated Career Technology Education Teachers, Nicole Reidinger of Jefferson Houston Middle School and Kyle Godfrey of George Washington Middle School, have been teaching wood technology classes for more than a decade. Hundreds of middle school students from an urban area have had the opportunity to work with wood. They learned to design projects, sand, nail, paint, stain and always to “measure twice, cut once”.

The wood technology projects in these Alexandria middle schools are as diverse as the student population constructing them. Over the years these young crafters have created cigar box guitars, wooden speaker boxes, CO\textsubscript{2} Dragsters, skateboards, and model skiffs. On a larger scale, Kyle Godfrey is making two skin-on-frame kayaks with his students. The classes at these schools have also made a life-size skiff – a small, coastal or river boat. These complex projects help the students grasp the concepts of larger project planning and teamwork, while also embracing the history of coastal Virginia, the place they call home. The kayaks will be raffled as a fundraiser for the George Washington Middle School PTA and Technical Education program.

Crafting a Business

Wood technology classes have proven to be a springboard for future wood craft entrepreneurs. Raised in Shenandoah County, current Virginia Tech University student Nathan McDonald participated in wood technology classes while at Strasburg High School. In the class taught by Brian Fisher, Nathan learned the art of turning rectangular pieces of wood into beautifully crafted pens. “Our students have crafted more than one thousand pens over the past seven years,” says Fisher. These pens were sold by the Strasburg Chapter of the Future Farmers of America (FFA) as a fundraiser for the organization. Nathan’s interest in pen making has extended beyond his high school years, resulting in the formation of his own pen crafting business. Nathan frequently uses wood harvested from urban forests.
thereby enhancing the value of this often forgotten natural resource. Woods used for creating pens include black cherry, black walnut, red cedar and maple. “Black walnut is my favorite because it doesn’t break when being turned, but soft enough that it turns easily. It is also a beautiful wood when it is sanded and finished,” says Nathan. Over the past seven years, Nathan has manufactured more than one-thousand handcrafted pens and created a business that is both enjoyable and profitable.

**Buy a Board, Build a Future**

In the world of woodcraft, those with experience are always willing to give back, to help a novice struggling with a project, or to provide instruction and guidance to the next generation of woodcrafters. The members of the Fredericksburg Area Woodworkers Guild embraced the idea of “giving back” when a local high school teacher came by the Guild to purchase wood for his class. Having a meager amount of money to spend for the amount of wood he needed for his classes, this public education instructor went away disappointed that his lumber needs far exceeded his funds.

Tim Eggers, the coordinator and lead instructor for the Fredericksburg workshop, approached the Guild members with the situation at hand and they unanimously decided to conduct a fundraiser for this wood technology class at Spotsylvania High School. Tim’s creativity also led to a name for the fundraiser: “Buy them a Board and Build them a Future.” The guild sold boards for $10 each to members and the general public, ultimately raising $4,400 in funds to purchase lumber for this class to learn the art and skill of wood crafting.

In a relatively short period of time the Guild was able to provide the class with enough wood to last at least two years. Tim recalls, “This was a wonderfully rewarding project for the Guild to hopefully plant some seeds that one day may result in a new generation of woodworkers.” This lumber donation demonstrated community engagement in student learning and totally changed the attitudes of some of the students from not caring about wood shop class to being engaged and eager to learn.

The Virginia Urban Wood Program partners with wood technology education programs by conducting outreach opportunities, including portable sawmill demonstrations. New urban wood entrepreneurs are provided marketing assistance for their products. Urban and local wood businesses are promoted via the Urban and Small Woodlot Forestry Business Directory (www.vaurbanwoodhelp.org) Additional information on Virginia's Urban Wood Program can be found at www.vaurbanwoodgroup.org