



BACK TO SCHOOL

Exploring the role of woodshop in general education

By Doug Stowe

“...the great secret of education is to combine mental and physical work so that one kind of exercise refreshes the other.” – Jean Jacques Rousseau



THESE BOXES, COASTERS AND CUTTING BOARDS are typical of the Clear Spring School woodshop's annual fundraising projects, with the money being used to support educational travel. The projects, many of which are branded with the school logo, are popular gifts for parents and friends during the holidays.

The Wisdom of the Hands

AS A SELF-EMPLOYED WOODWORKER AND WRITER, I had participated in conversations on the Internet about the decline of woodworking in schools, and the steady shift in education away from the opportunity for direct hands-on learning.

As a student many years earlier, working with my hands had been my personal salvation. In high school, working with wood in my dad's basement workshop had given me a much-needed escape from academics. In college, my participation in pottery classes provided the mental health necessary for me to graduate.

In examining my own learning style and educational experiences, I suspected that having the hands engaged in learning was an important element for all students, not just for those not planning more academic careers. In addition, stories from local parents and teachers and from the national press painted a picture of modern education in which too many students were disengaged from the learning process and disruptive of the education of others. I began to wonder whether there was a link between the failure to engage the hands, and the failure to engage the head and heart in the learning experience.

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You might have noticed by observing your own learning process that when you have a direct application for a skill or subject matter, you find more energy for learning even when the subject is difficult or the skill hard to master. In addition, when knowledge is put to direct use, what you have learned will be remembered more thoroughly than when it is unrelated to your own life and experience.

One of the major challenges facing educators is that of helping students to understand the relevance of subject matter to their own lives. This matter of relevance becomes more important in education as children grow from the early readiness for imaginative play into an age in which they wish to be taken more seriously as adults. Unfortunately, subject matter often appears irrelevant to students looking for meaning in their lives, and they will quite likely have much more energy for attending to their social lives than for attending to the lessons adults have the responsibility to teach.



THE SEVENTH AND EIGHTH GRADE BIOLOGY CLASSES wanted to acquire snakes, so the students designed and made the cages together in the workshop.

to help students understand how learning these things will be useful in life. But, time in the woodshop can amply demonstrate the connections between “isolated” subjects, bringing their study into practical application and use. The huge question that students wrestle with – “What’s in it for me?” – can be answered in the woodshop.

The Clear Spring example

Ironically, “What’s in it for us?” is the question school administrators must ask when evaluating the appropriateness of woodshop in the education of their students. It’s exactly the question we set out to explore for ourselves at the Clear Spring School in Eureka Springs, Ark., when we began a woodworking program to explore the potential of the woodshop in general education in the fall of 2001.

In the woodshop at Clear Spring we adopted as our mission:

- To make woodshop participation relevant to the lives of all our students and meaningful in their education.
- To utilize the woodshop to

reinforce and support the student’s interests in other areas of study.

- To serve as a model to demonstrate the relevance of woodworking in modern education.

We are now starting our fifth year of woodworking at Clear Spring and inspired by the philosophy of Educational Sloyd (“Back to School,” Woodcraft Magazine, Jan. ’05), we’ve grown from a high school program to one involving every Clear Spring student. The program starts as early as the pre-school and kindergarten level, where scraps from the school’s other woodworking activities are nailed and glued into sculpture. We’re convinced that the woodshop has value to all students, regardless of gender and regardless of personal academic objectives. In addition, the students have become very enthusiastic woodworkers. In fact, for many students, woodworking has become a favorite school activity.

There are a variety of differences between the woodworking program at Clear Spring and those in many other schools. Special woodworking projects are planned in association and cooperation with others on



JODY’S TURNED BOWL – thin, light and well-finished – is an object of great personal pride.

Fractions? Geometry? Algebra? Environmental studies? History? Physics? These subjects may seem unrelated and it is often difficult

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MAKING GEOMETRIC SOLIDS from wood presented a great way to reinforce the study of geometry.

the teaching staff to integrate with other subjects and areas of study. Woodworking is generally regarded as part of the arts curriculum, and we hold an annual exhibit to share the artistic merit of the students' work with the community. Projects are selected to offer design opportunities so that the student is involved in the design of work in addition to its making.

Our objective isn't to direct students into technical careers, but to build confidence, strength of character, and problem-solving capabilities useful in all careers and in every educational experience. In addition, we've actively marketed the program to the community through turning seminars, special events like our Old Tools Rodeo and Round-up, community-wide marketing of student-made products to support student travel, and regular exhibits of student work.

Reversing the trend

In the five years since our program started, there has been a continuing loss of woodworking programs in schools, a trend that will be very

difficult to reverse. For me, going from my woodshop to teaching each day has been an incredible adventure and learning experience. I have become even more convinced that woodworking education should be offered in all schools. My convictions come from direct experience in our Clear Spring woodshop, watching my own students, but also from my study of modern educational theory and from keeping up as best I can with current research.

Howard Gardner's theories of multiple intelligences and diverse learning styles suggest that students require diverse learning experiences like those that woodworking can provide. The writings of neurologist Frank Wilson in his book, "The Hand, How Its Use Shapes the Brain, Language and Human Culture" (Vintage, 1999), illustrate the important role of the hand in shaping human intellect. Research scientists using magnetic resonance imaging to observe the developing brain in children have learned that not all brains develop exactly alike nor in the same exact time

sequence, perhaps explaining why some of us are late bloomers, and offering reason for great caution in our teaching of children.

It's far too easy to convince children forevermore that they are stupid or inadequate when perhaps the real stupidity lies in our own failure to understand the natural variations in the ways our own intelligences develop. Children in today's schools live with immense pressures to perform to unreasonably imposed standards. We give too little allowance for individual variations in learning style, or sequence and timing of growth.

Asking the right questions

In light of the challenges facing students and teachers, testing, testing and more testing to measure learning and teaching performance, I have personal empirical questions to ask: "Think of the knowledge that you use each day, and when you learned it ... was it in school?"



FOR EARTH SCIENCES and the study of minerals, the Clear Spring shop made mineral collection and display boxes that the students filled with samples collected during field trips. Natasha shows the wooden grid she made for one of the boxes.

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A second question might be, "Where did you get your confidence for learning and in yourself as a learner?"

Try these questions yourself. If you're like most, you noticed that school helped shape your confidence for learning, but that your important knowledge came later through actual life experience. The word education is derived from the Latin word "educere" which means, "to draw forth."

It's an error to try to fill our children's heads with facts and theories, when they might be best served by time in the shop, being drawn to discover confidence in their own powers of observing, learning, practicing and creating.



WITH A SINGLE LOOK at Tony's face, it's easy to see the pride in his

We need to look at our own educational objectives. Are we passing children through an educational assembly line, upgraded for efficiency, but modeled on the factories that made Model Ts, or are we teaching to engage the confidence and curiosity required for a lifetime of learning?

This question won't be resolved here. While none of us are empowered to make the kinds of changes that provide woodworking

opportunities for all children, those of us who have woodshops can make a small gesture with our own children and grandchildren while we press for educational reform. Let's invite children to share our loves of wood, of tools, of processes of cutting, shaping, assembly and finish; creating objects of lasting

purpose and beauty with new generations in mind.

In addition to the Clear Spring School, Doug Stowe also teaches at Arrowmont, Marc Adams School and the Eureka Springs School of the Arts. His most recent book is "Taunton's Complete Illustrated Guide to Box Making." He lives in Eureka Springs, Ark.

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