

Why Everyone Should Take Shop Class

Shop class, once a staple of American high schools, has been nearly decimated by the digital age. High school students have little time for electives, and when they do, they often choose technology classes. Schools are selling off their circular saws to buy computer labs, and trading in their welding tools for web-cams. After all, why do our kids need to know how to build a birdhouse when they can buy one at Home Depot for \$9.99?

Some are calling for the return of shop class. In his 2009 book, *Shop Class as Soulcraft*, Mathew Crawford praises the benefits of learning how to do manual work. In a time where most of our work is intangible, working with our hands can bring a sense of satisfaction that is lacking in our virtual lives. Even if one doesn't go into a manual trade, the ability to make and fix the utilities we need can help us "live concretely in an abstract world."

Mark Leeper was a Civil Engineer before deciding to become a math teacher at Menlo-Atherton High School. Once he got there, he found more personal reward in the hands-on nature of teaching woodshop. After two decades of helping kids learn woodworking, he has seen every type of student benefit from the lessons of practical experience. Here is a list of reasons why every student should consider taking shop class:



Become Self-Reliant

The generation before us sewed their own clothes, changed their own oil, and built their own fences. But now, Crawford writes, "What ordinary people once made, they buy, and what they once fixed for themselves, they replace entirely or hire an expert to repair." This leads to a feeling of dependence, of being unable to navigate the world on one's own. Leeper has seen his students learn to be practical by acquiring the know-how they'll need to survive. Once they've designed and created their own step stool, they're more willing to look at a broken faucet and think, I can fix that. This not only saves money, but helps people feel more in control of their own lives.

Understand the Principals of Math and Science

"Project-based learning" is a buzz phrase in education. Students learn better, it is proposed, when learning grows organically out of an interesting project. Shop class, says Leeper, is the original project-based laboratory. Students must learn math and physics if their projects are to succeed. The Pythagorean theorem, fractions, and geometry all come to life when it's time to build an octagonal end table.

Learn the Value of Persistence

Most classes in school emphasize getting the right answer the first time. Students become fearful of doing things the wrong way, and may become discouraged about trying at all. But in shop class, persistence is encouraged. There's more than one way to get something done. And if something goes wrong, it can be undone and fixed. Shop class teaches our children to persevere, to look beyond the first failure and keep trying until they succeed.

Find Satisfaction in Taking a Project from Start to Finish

Studies are starting to show that initiative and hard work may be more critical to success than intelligence. Shop class is one of the few places where students are encouraged to envision a project and then figure out a plan to make it happen. There is no better way to stimulate creativity and problem-solving than to allow a student free reign with a room full of power tools, doing work that fully engages his mind and his body. He'll never forget the satisfaction of pointing to a project and saying, "I made that."

Help Students Find Their Strengths

Not every student finds school easy. It is an institution that emphasizes intellectual ability over all other talents. Shop class is one of the few places where students are encouraged to explore other skills. "It is important for our children to experience a variety of opportunities in school," Leeper points out. "That's how they can determine at what they can be successful." Once a child feels capable in one area, his confidence will carry over to the rest of his activities.

Launch a Hands-on Career

Our country works because we have all kinds of different people doing a variety of work. We do need engineers and lawyers, but we also need skilled electricians and plumbers. Job satisfaction in these trades is good, explains General Contractor Dave Wilson, because, "There's nothing like taking an idea, a concept, and turning it into a tangible thing." Additionally, these jobs offer security because they cannot be out-sourced or off-shored. And shop skills are also important for white-collar jobs. Leeper has had many graduates call to thank him for being a critical part of their education, including a helicopter designer and the founders of Ladera Longboards skateboard company.

Every child can benefit from a year of shop class. Whether it's to improve her math skills, her perseverance, or her career options, she's sure to enjoy the experience of developing and producing her own projects. Or, as Crawford more eloquently puts it, she'll find fulfillment in "seeking out the cracks where individual agency and the love of knowledge can be realized today, in one's own life."