

KAYLA DEAN

David M. Fry

Have discarded vocational tracks, student indifference, and inhouse robotics labs and 3-D printers made traditional industrial arts obsolete in high school? Certainly not in Mustang, Oklahoma, where Kayla Dean spent four years learning basic woodworking skills and making a customized classical guitar, lyre base writing desk, and mahogany spindle cradle. In fact, the cradle won second place in the open division of the 2015 Association of Woodworking Furnishings & Suppliers Fresh Wood Competition, which attracted almost 170 secondary and postsecondary student entries.

Kayla's accomplishments reflect the extraordinary depth of woodworking instruction at Mustang High School, which employs three teachers for a woodshop serving 200 students, including many girls. Projects range from furniture and musical instruments to boats and pool tables. Mustang's program goes so far beyond the basic training offered in other schools that national awards and local commissions are not uncommon.



This closeup captures the clean execution and range of joinery in the cradle. Waxed dowels through the end posts allow smooth, quiet rocking.

Photos: Alan Harp



Such success speaks not only to the talent and industry of the students, but also to the abiding guidance of veteran teachers like Mike McGarry, Kayla's shop instructor and most important influence.

Getting serious

As a ninth-grader headed into the sciences, Kayla enrolled in woodshop as something of a lark with friends. By late spring, though, she was hooked, with enough hand and machine tool experience to look beyond pens and jewelry boxes toward more ambitious work in the advanced classes. The cradle project of her senior year proved to be her favorite, she recalls, because "I could combine turning with the general woodworking skills I had already learned." It was something of a gamble, because "I came to [larger scale] turning late and was initially not that great at the lathe." Even with the demanding frame-and-panel fabrication of the end boards, "Making the spindles uniform was definitely the hardest part of building the cradle."

Relying on available work plans meeting government safety specs, Kayla tweaked various design elements, including the shape of the spindles. She used the school's 4'- (1.2m-) bed lathe to turn the two large end posts and took



Kayla made and sold pens to finance her church activities abroad and the trip to the AWFS Competition in Las Vegas.



Photo: Jeff Marzec

The award-winning cradle with maker Kayla Dean and mentor Mike McGarry, who also coached Kayla's close friend and AWFS first-prize winner in seating, Brittany Hoffmeier, for her Maloof style rocker.

a mini-lathe home to speed up production of the twenty-two short spindles. After developing master spindles, she carefully refined duplicates by eye, using calipers and standard spindle chisels. All together, the project wound up consuming five to ten hours a week outside class, and in the end conveniently yielded a functional, rocking cradle two weeks before her niece was born.

Family followers

Reflecting on an unexpected dividend, Kayla notes, "The coolest part of my woodworking is that I have been able to get my whole family involved." Mom Jennifer makes pens and seam rippers, while dad and brother also occasionally turn at the high school, where Jennifer works and has ready shop access. And a new, lightweight lathe now fills out the home woodshop, where small projects can be completed independently of school equipment.

Beyond school

Now a sophomore at Northeastern Oklahoma State University, Kayla finds time for woodturning only when she comes home. "At this point, it's definitely more of a pastime," given the demands of classes. But a strong interest remains: "I want to become an optometrist so that I can afford my hobby." And, conversely, who can doubt that the absorbed rigors of the woodshop—detailed planning, precise measurement, and polished completion—will ultimately make her a better health professional? ■

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