Dave Brown is passionate about furniture building, joint design and helping his students find the best solution to making their pieces be exceptional in quality. Fifth year student, Erin Heiden, wanted to add legs to her piece that she was building but she didn’t want to use the typical metal brackets to attach her legs. She approached Dave about how she might solve her joint dilemma.

“My furniture design students often come up with designs/parts that look difficult or impossible to build. We have three CNCs in the design workshop, and two of them have been modified to allow CNC cuts on boards mounted vertically or at an angle or compound angle. When you are released from limitations of flat cutting a world of potential is revealed. What seems impossible or difficult to make at first often becomes possible with a little sketching, jig design, experimentation, determination and innovative tool path creation.”

Dave was able to design a joint solution for Erin’s piece that allowed her to attach her legs without using brackets and by making the legs look as though they are one with the piece. “Students will propose a piece that needs a complex joint and I’ll go home and sleep on it. I’ll usually wake up the next morning with an idea on how we can make it happen.”

“Students sometimes design pieces with a full understanding of how it will be built.” Dave says it is important to understand the structural properties of the materials used when trying out an original joint or cutout. Grain direction, wood expansion and contraction, dryness, natural flaws, stiffness, flexibility, and tendency to split are just a few of the considerations that have to be factored into a furniture project.

“I’ve always had an aptitude for engineering. My grandfather was an architectural engineer. I also feel that taking drafting in high school really helped me. They don’t teach drafting very often in high school anymore which is too bad.” IAPD is extremely fortunate to have Dave Brown’s skills, passion for joint design and understanding of how to make furniture.