



## Students Get Down to Business with Graphite™



*School House Graphic Products is a self-sustaining business managed and operated by the students of Arnold High School in Arnold Nebraska, population 600.*

*Using Graphite precision CAD software and an array of equipment, these young*

*entrepreneurs produce signs, trophies, furniture and other products under the supervision Clay Mohr, shop teacher and Julie Mohr, art instructor.*

The Mohrs started using Ashlar-Vellum software many years ago in their classrooms. About 12 years ago they got the idea for the student-operated business. Earning college credit and a summer stipend, the students keep the shop running year round now to support their customers.

Students use a 25-pack of Graphite on the Mac and an array of printers, lasers and CNC machines, all purchased from the profits generated by supporting the production needs of local government, businesses and non-profit organizations in their area. Ashlar-Vellum's easy interoperability with other software allows them to design in Graphite, add graphics in Adobe, then output to whatever is needed to drive their equipment.

The list of projects includes car graphics, signage and plaques. This year the students are doing the school's gymnasium cutting vinyl designs for the floor, mats and signage. Other projects include bunk beds and a child's chair puzzle, assembled without metal connectors.

Students start using Graphite in the 6<sup>th</sup> grade with Introduction to CAD Drafting & Design. By the 8<sup>th</sup> grade they've taken on a design project that can be produced in-house and sold commercially. Requirements include figuring the cost of materials and profit margin.

Clay says the students find Graphite a very useful tool for solving geometric problems:

***"The beautiful thing about your program is that I don't have to spend a lot of time teaching software. I get to teach drafting. It's very user friendly."***

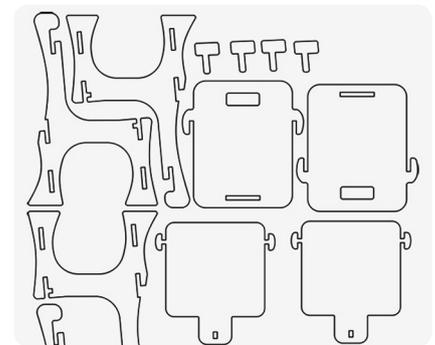
Next year the Mohrs hope to upgrade their Vetric software for their CNC router and dedicate time for designing in Cobalt 3D modelling software.

After graduating from Arnold High student's often go into the trades, or study engineering. Many of them simply use their design and production skills avocationally. But the skills they've learned, particularly in applied mathematics and problem solving, set them well ahead of others. Clay tells us:

***"Our kids really know what it takes to end up with an end product."***



Students design and apply vinyl art and lettering for the local fire department as part of their self-sustaining business.



**Above and below**, a child's puzzle chair put together without metal fasteners.



### Background/Contact

For more details on this project contact:

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