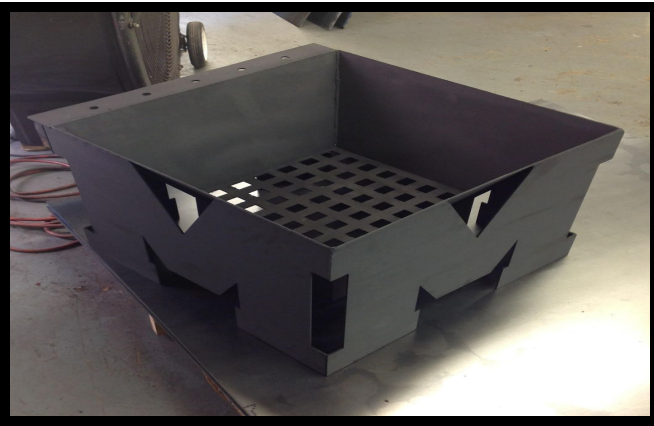


Cub Manufacturing News 10/13/2017

WOW! We're just not sure where the first semester has gone! Cub Manufacturing has been crazy busy with some pretty incredible opportunities and changes which have been great for our program. We will do our best to quickly catch you up and promise to keep in touch more frequently.

Most notably, the 2017-2018 school year began with including our Cub Engineering students with our Cub Manufacturing program to create the Cub STEAM Lab for student learning. We are very excited about what this means for students in our manufacturing and engineering pathways, but also what it will mean for our customers. The combination of these two programs will truly give students the opportunity for collaborative work and learning on projects from beginning to end. In addition, we are able to expand our team which means we can really work to fine tune the 'back office' processes to ensure we are continuously improving and providing students the opportunity to cross-train across the functional aspects of the business.



Project Updates

Design work: Education Foundation Auction

Cub Engineering was asked to design a fire pit for the annual Education Foundation Auction Dinner. Together, our Cub Engineering and Cub Manufacturing teams produced a one-of-a-kind product which was auctioned off to raise funds for academic teams and teacher grants. This is a great example of how Madison students are producing and achieving in ways that help themselves and fellow students and teachers achieve success. This collaboration between our two classes is a great example of how work is being completed to benefit the community and our schools.

Lots of Moving Design Elements: North Madison Baptist

The Cub Manufacturing class has been very busy in the past several months working on custom gates for a local church. North Madison Baptist Church contacted us through our [Cub Manufacturing](#) Facebook page and ordered these gates to stop traffic flow behind the church where children play on the playground. Initial work on the gates began in the lab last spring before school dismissed for summer.



Work continued a bit over the summer and both teams picked up and worked together to install the specialty gates during seventh period once classes resumed in August. Students worked to dig holes and insert the poles to connect the gates. Once the angles and swing radius were confirmed, the welded poles were set and filled with concrete. This was a big and unique job and provided several learning opportunities throughout the design and installation processes.



Beauty and Preservation: City of Madison

We are very excited to be on another project with the City of Madison! One of many projects we are currently working on is building and welding tree grates for Downtown Madison. Currently, many trees are not covered and as a result pedestrians are walking on the root base, tearing up the soil, and climbing all over the trees. The new grates are measured to precisely fit each and every tree that Downtown Madison has acquired over the years and will now let the soil be preserved so the tree will be able to grow and prosper. This will also provide a safer pedestrian experience with a level walking terrain as folks are out and about enjoying our great city.



Cub STEAM Labs: Recruiting Younger Students



Students from the MJHS came for a visit to get an early start on their construction career here at MCHS. Under Mr. Phagan's vision and instruction, 8th grade students have unique opportunities to have hands-on work and interaction with a number of skilled labor and restoration professionals within our community. These opportunities give incoming freshman the chance to see if they are interested in classes like Cub Engineering and Cub Manufacturing which are part of the Advanced Manufacturing and Engineering Pathways available for MCHS students. Strategic academic planning and College and Career Readiness begins early with Madison students!

Students are pictured above with their latest project - a human head constructed out of metal which they are welding and assembling. The design for this project came from Mr. Phagan and once complete will be placed on Main Street in front of his art gallery - Gallery 115. Mr. Phagan emphasized that his only role in this particular project was to design the head. All elements moving forward throughout the remainder of the project are up to the students and their imagination.



Student Collaboration is Key

At the beginning of the school year Cub Engineering designed and built two wooden, rolling carts for the Madison Marching Cubs Band. If you have ever seen our Marching Cubs in action, you know they have a lot of equipment and tons of moving parts in their performance. We visited with members to better understand what would help lighten their load and expedite transportation of equipment.

With initial designs done and product delivered, we are already thinking about how we could improve upon the design taking in weather considerations. The picture at left, was early on...we will try and remember to catch them in action for a photo update in our next edition.

We are very excited about what this year holds for the Cub Engineering and Manufacturing STEAM Learning Lab. We will keep you posted, more frequently, once we return from fall break. We hope everyone enjoys their time with family and friends. Please be sure to 'like' our [Cub Manufacturing](#) Facebook page to stay up to date on all things CUB!