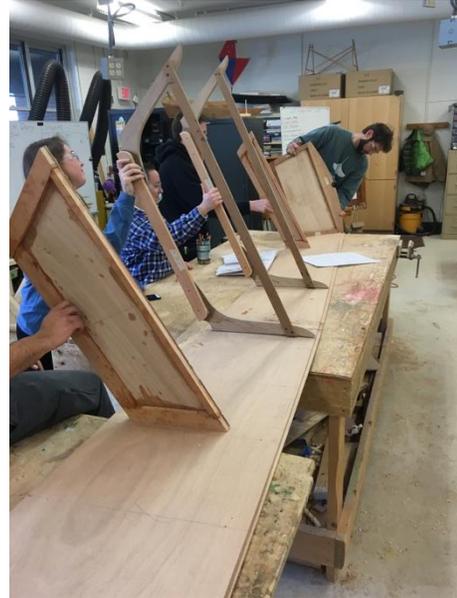


## And We Have a Boat!

This week in the shop was the first time since the semester started that we all got to work together on our skiff, as previously we had all been working on individual components of the boat (side planks, frames, bulkheads, transom). Finally, they were all complete and ready to go together. The method that was introduced to us for bringing all the parts together involved dry-fitting everything together, then detaching all the parts and gluing it all together again. This ensured that everything lined up well before we finalized it all with glue.



We began by predrilling guide holes in the side planks at each location where frames or bulkheads would be placed. Then we started at the bow of the boat with our mahogany stem and attached both side planks to it with 1 1/4" stainless steel screws, making sure to line up the bottom of the stem flush with the side plank chine. We then began working our way back toward the stern, with the boat upside down, first attaching the front bulkhead, then the two central frames, the second bulkhead, and finally the transom. It took all hands on deck to align the parts with the side planks, as they are 14 3/4' long and plywood, so they needed to be bent to follow the shape that the internal framing pieces



presented. We had two people holding the piece being attached, another holding the side plank in place, and one more predrilling holes and screwing everything together. After several failed attempts at different bracing practices, we were able to find the best position to place clamps. Having the clamps in place made it easier to align the frames and bulkheads to our marks.

Once the transom had been attached, we traced the positions of all the parts on the inside of the side planks to make reattachment easier. We also made reference marks on the joints between side plank and part. The marks, often shapes of some sort, were drawn from the side plank onto the part and back onto the side planks. Thus, when we put the boat back together with glue, these marks acted like puzzle pieces that fit together very specifically.





Having marked out positions and admired our work, we took the entire boat apart, piece by piece in the same order we had assembled it. We used diluted alcohol to clean off dust from the spots where glue would be placed. Glue was prepared to a consistency slightly more fluid than peanut butter, then applied to the areas on the parts and side planks where they would be attached with putty knives. We had 2 people applying the glue, and the rest of us followed and reattached all the parts to the side planks with screws. Using this two-step method, we were able to assure that our joints were fit correctly and

also that our boat would be extra sturdy, being held together by both stainless screws and glue.

It was really great to see that boat come together and finally look like a boat. Making all the smaller pieces seemed somewhat monotonous at times, but being able to see how well everything came together made it all worth it. Also, the dry fitting method we used made so much more sense than assembling everything in one try. As accuracy is key in the production of a boat, dry fitting allowed us the wiggle room we needed to correct some lines that didn't quite match up and the freedom to make minor mistakes that were easily fixed by repositioning a screw or clamp. Taking the time to assemble the boat twice definitely ensured efficiency along with accuracy, as I've seen enough instances where, once the glue is set, the mistakes are then discovered and you're really up a creek.

