Hi 7th Grade Parents,

Here's an update on what we've been up to in the Design+Make+Engage (DesignME) course!

The central question we are exploring is How might I use design thinking to understand and effect positive change in the systems that make up my world? Going deeper, What can we design, map, take apart, put together, using digital and traditional fabrication tools, to explore this question. How might we combine our work with the service learning course? With math, science and humanities? And, How might we develop a supportive critique community to provide each other with feedback?

We launched into our exploration with our first design challenge, Design a backpack improvement as a response to students now having to carry their school belongings at all times. We’ve pushed on two aspects of design thinking in this context: identifying needs and prototyping. We prototyped in cardboard, made final patterns, and are now finishing up the final projects using repurposed yard signs (Corrugated plastic, which demands a 2-D to 3-D “origami” approach to fabrication--a big visual-spatial stretch for many of us. The need to use rivets to connect the material further complicates this fabrication technique.) We will next reflect on this process, with the goal of reinforcing the importance of defining and adhering to the identified need, and using the prototyping process to ensure the final product is viable.

I prefer that the projects we do are relevant to what is happening in students’ lives, such that I am on the lookout for current events, teacher
collaborations, design/build service learning projects, and opportunities to amplify academic concepts. Moving between @home and the workshop also presents different opportunities. With this in mind, last month we used students’ math class geometry studies—specifically angles and types of triangles—to look at how geometry can drive design decisions both in engineering and aesthetics.

We followed this with an @home challenge focused on materials choice and repurposing, in this case using an “unexpected object” in a workplace improvement. We looked for inspiration in the work of artist/engineer Tom Sachs, who questions “American cultural detritus”, and found further connections to the Mars Perseverance landing that week.

This first round of projects has been primarily focused on designing for ourselves. Over time we will turn our attention to designing for others and prioritizing empathy, and systems thinking. We will also more formally use the design thinking process. Meanwhile, we are now starting to develop our design community and our critiquing skills, sharing our thoughts with each other about how we are fulfilling the design challenge criteria, our individual approach to the problem, and craftsmanship. This primarily happens within the Flipgrid video app.

We will also move between traditional fabrication and digital fabrication, with the goal of providing students with an introduction to the skills and possibilities of physical computing and digital fabrication—and the Innovation Workshop resources—for their own endeavors. We have some experienced programmers and digital designers in this cohort who will be able to push their skills as appropriate.

There’s a bit of the bigger plan and what we’ve been up to so far. I very much look forward to seeing how this design community engages with
projects and each other as we move further into the semester. As you are well aware, the hybrid situation is tricky for us to negotiate as smoothly as we would like. Please let me know if anything is coming up specific to this course that I should know about.

As always, thank you for your wonderful support,
Ilya