2023 Vermont Agency of Education STEAM Grant Williston Central School STEAM Team







In February 2023, the Vermont Agency of Education offered a special grant opportunity with some pretty tight restrictions - pull together a group of students, have them identify a local community problem and then use STEAM (Science, Technology, Engineering, Art and Math) to solve it. The biggest challenge was that the entire project had to be created and completed within 6 months by June 30, 2023. That was crazy quick - but Abby Bowker - our WCS middle school art teacher and I came up with

the idea that if we used the grant funds to purchase some lasercutters we could have the

students create personalize hallway signs for teacher classrooms. The students identified two problems that this could help solve - the ongoing challenge for any parent / newcomer to easily find a teacher's room and more importantly that these could help build a school sense of community and belonging as they would be personalized with special icons and quotes.

We were awarded \$20,000 which was enough to purchase two new glowforge lasercutters as well as materials and small stipends for Abby and I as this was a two day per week afterschool project that ran from March to June. Here is a link to a youtube video which provides a real clear overview of the steps of the project as well as a summary of our outcomes:

https://youtu.be/duFD0rEkfNo

As a summary we had students:



Learn a bit about graphic design such as font and layout choice, from this work they
created a few templates and ultimately created a packet from which teachers could
select their sign elements



- Learn how to design raster / vector files and operate the glowforge to cut and engrave plywood
- Interview teachers, create the signs and the deliver them with velcro mounting tape

Midway through the project students also noticed that our entrance only had "welcome" in English, despite the fact that there are over 25 different home languages for our families. So they researched and translated "welcome" into each of these languages and used our Makerspace Cricut vinyl cutters to create a colorful

international welcome collage for our entryway windows.



