

Play it By Ear Project
 David Garcia, Math & Science
 Nathan Ewart, Humanities
 Sixth Grade
 High Tech Middle Mesa

In this interdisciplinary project, 6th grade Math/Science and Humanities classes explored the question of “How do we engineer for inclusion?” by focusing on the visually impaired community. Students explored sound, light, and inclusive design to create game adaptations for sight-impaired peers. Research occurred between the two classes including historical figures with disabilities which led to CAD-designed 3D prototypes of inclusive games. Students collaborated with the So Cal Beep Baseball Association and UCSD to design and engineer working beep baseballs to provide affordable equipment for this inclusive sport. Students learned to solder the equipment and shared these experiences with the community at an exhibition which included guests from the Beep baseball community.

Teacher Reflection

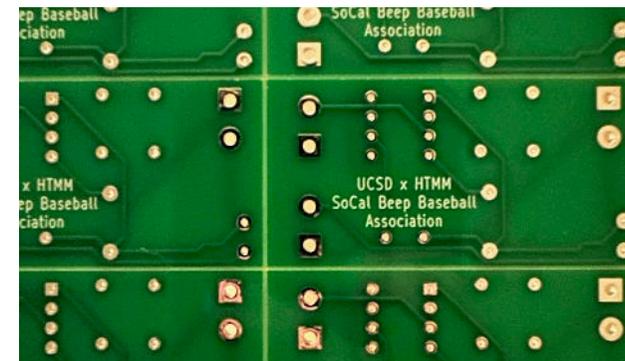
What it became was the kids actually producing something that’s going to fulfill a need beyond what the School needs. It’s even beyond what the visual impairment and community needs, specifically the baseball community. I was excited that an idea of a project could unfold and design into something that is actually really rad and really making an impact.

—David Garcia

Student reflection

When they told us that there was an equipment shortage, and that not many new players could play I figured out that this project was so much more because we’re actually helping the community out. There are not many baseballs right now because the only people manufacturing them are volunteers in their spare time so we have learned from scratch to design and make these baseballs and now we can deliver them to the people who need them most.

—Blake B.



To learn more, visit hthunboxed.org & hthgse.edu