



FIRST Equity & Inclusion Financing Initiative for FIRST in Upper Midwest (FEI FI FO FUM GRANT)

Grant Report for Team 7028 - May 2023

Project Goal:

Several years ago, those involved with Team 7028 decided that creating a booster club was the most beneficial way to financially support the team. Team 7028 began to actively work with their booster club, STMA Robotics, to help determine fundraising goals. Part of that work included taking a closer look into the needs of our community in relation to the STEM activity options for our local youth. STMA Robotics found diversity gaps in available programming, and decided to make FIRST Lego League and FIRST Tech Challenge programs available, as well as connect with area Boy and Girl Scout troops for outreach events. One of the motivating factors in focusing in these areas was the lack of significant female representation in Team 7028. Our goal to take specific steps to target the recruitment of girls in our newly available FLL and FTC programming, as well as the Girl Scout outreach, was driven by the 3 following factors:

- 1) Studies show that hands-on projects help retain girls' interest in STEM.
- 2) Including parents in activities has shown to help build the confidence in girls that they need to feel like they can succeed in STEM based projects.
- 3) Our own research showed that 80% of the girls who participated in the local FTC program offered in past years had continued to participate in our current FRC program.

Fund request:

\$600 for 6 - \$100 mentor discounts for our new FLL and FTC teams.

\$600 for up to 3 chromebooks (\$200 each) for the FTC program.

\$225 for a Romi robot and arm kit for the Girl Scout outreach initiative

Use of Funds:

Provided \$600 in mentor discounts for FLL teams. The interest in FLL was incredible, so we formed many more teams than originally planned. We allotted the mentor discount funding in its entirety to the FLL teams.

Purchased 2 Vostro laptops for FTC at \$549 each. There were several used laptops donated by a company connected with our team that were perfect for the FLL program. We were able to utilize the donated ones for FLL, and then use grant funds towards the purchase of the Vostro laptops for FTC.

Purchased 1 Romi robot (\$235.85) for the Girl Scout outreach events.

Outcome -

The new programs we offered were very popular, and we formed many more teams than anticipated. We had hoped for a larger percentage of girls, but ended up with a 25% representation. We were very lucky to have had a female coach for the FLL Explore teams. Two out of the 3 female FLL team members had parents who participated as mentors, as well as 1 of the 3 female team members in FTC.

That female FTC team member, Mollie, was extremely involved in programming. She spent a lot of time working with her parent (mentor) on the new laptop. She was incredibly engaged, and having a quality piece of equipment made a huge difference.

As for the Girls Scouts outreach event, it was a huge success. We invited Scouts in 6th-12th grade. We had stations set up with activities that would assist them in earning their robotics badges. One of those included the Romi robots. We had so much interest, and positive feedback from that event, that we held a second one for K-5th grade Scouts. These events were led by many female FRC members.

Next Steps -

We will continue to offer FLL and FTC next fall, and be intentional about displaying who is represented in our STEM programming.

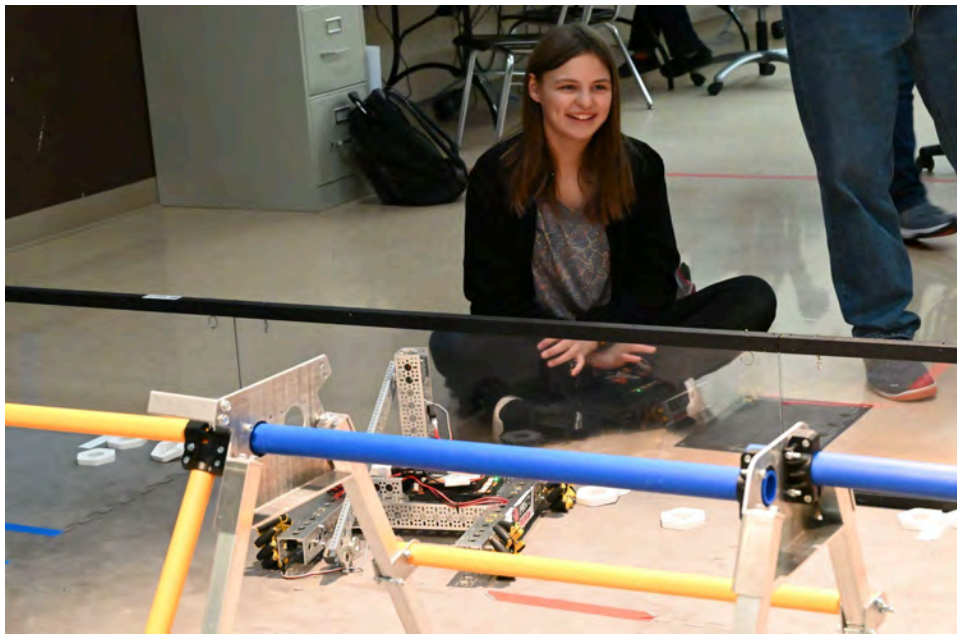
We will also continue with our Girl Scout outreach efforts. In discussions with local troop leaders, it sounds like we could add several more events next year.

We would also like to host a family STEM night for community members. Families would come and build a small robot, with guidance and assistance from FRC members.

Including family events has the potential to introduce STEM events to girls who would not normally seek them out.



FLL Team members at practice



FTC Team member at practice



Girl Scout Visit #1



Girl Scout Visit #2