



GRANT REPORT  
FRC Team 2129  
May 30, 2024

**Team 2129 Ultraviolet FEI FI FO FUM Grant Summary**

Our team is very grateful to have received a FEI FI FO FUM grant. We used the funds provided for two new team initiatives - our Girls in the Shop program and the Windom Elementary School Science Fair.

Last fall, through the Girls in the Shop nine-week program, we encouraged girls and those outside the gender binary at our school to step into our shop each Monday evening for hands-on projects led by our team's female and non-binary students with an all-female group of mentors assisting. Sign-up was open to the entire school as it was not meant to be a method of team recruitment, but instead as a way for any other student at the school to get encouraged and inspired in STEM. Thirteen people signed up. Participants built four hands-on projects (designed by our team members) where they learned and utilized technical skills. Some of those skills included woodworking, soldering, and CAD. We helped them build birdhouses and trebuchets, design custom 3D-printed manta ray figures on Onshape, and solder an alternating flashing light circuit into our 3D-printed figurines. It was such a fulfilling experience and we feel it helped the girls and non-binary students that participated not to hesitate to engage in a STEM field!

With the grant, we also started a science fair at Windom Community School. Windom is Southwest's most diverse feeder school and had never had a science fair before. The project's conception was at an outreach event at the school when talking to students and teachers, we discovered that they did not have a science fair at their school. Over the summer, we worked with teachers and school officials to organize the event. We decided to limit the science fair to 4th and 5th graders to streamline organization for the first year. In the fall, we introduced the fair to the students, who were incredibly excited. We visited twice more to help them brainstorm and create their projects and help with any problems. On the night of the science fair, members of our team went around to the projects, dressed as scientists in lab coats. We listened to what the students had researched and gave out pins and stickers to everyone. Over 60% of students in 4th and 5th grade participated. There were 71 projects all together but many of those were created by pairs or small groups of students. We allowed

projects to be fairly open in subject matter and did not give out prizes. Our feeling was that projects should encourage learning about something of interest on a deeper level rather than trying to make a perfect looking and exciting project for judges. Making this event a reality required working with school administrators, classroom teachers, the school's science specialist as well as the district's science TOSA, parents, the PTA, and facilities management. A fifth-grade science teacher at Windom said, "Just wanted to say a huge THANK YOU for making the Science Fair such a success in its very first year!!! I think all of us at Windom were blown away by what the students put together - so thank you for inspiring them and us". The PTA President said, "... surprised how well that went and think it helped kids that don't get as much support with their projects at home" about the after-school help sessions.

In addition to these projects which required funds, members of our team also created custom DEI training that all members complete soon after joining and will receive a refresher on each year that they are on the team. Our DEI training was a collaborative effort with the Gender Sexuality Alliance to emphasize inclusivity and allyship in STEM. It was shaped to build a healthy team environment. It is part of an overall effort to be more welcoming to all and make everyone feel welcome on our team.

Our team intends to run the Girls in the Shop program again this fall. Some of the items purchased last fall will be useful again such as a new soldering iron. We also plan to not only help bring a science fair to Windom Elementary again this year but plan to expand it to include third grade as well and may add a help session. We are also still working on getting a visit by either the 3M Visiting Wizards or the Bell Museum to their school in the spring.

Again, thank you so much for providing the funds that made both Girls in the Shop and the Windom Science Fair possible and encouraged us to make all feel more welcome and excited about getting into STEM activities on our team, in our school and in our community!

[Slideshow of photos](#)