

ACMS Grant Request for Truckee Rotary

Name of Organization

Alder Creek Middle School PTO

Contact Person

Erin Videgain

Email Address

aldercreekpto@gmail.com

Phone Number

530-448-6675

Mailing Address

10931 Alder Drive, Truckee CA 96161

Make check out to

Alder Creek Middle School PTO

Amount requested

\$1,000

What, specifically, will the funds be used for?

Mr. Andrew Olson, a 7th grade science teacher at Alder Creek Middle School, has requested PTO help in purchasing 15 VEX IQ Robotics kits in order to offer a robotics course through the school's ACES (electives) program.

VEX IQ is a snap together robotics system, which offers a flexible platform on which students can design, construct, code, and operate robots to complete simple and complex tasks. The program is designed to be accessible to beginners, but scales in complexity to challenge experienced builders and coders. The kits purchased through this grant would be the foundation of the new program, which will eventually grow to include an after school robotics club and competition team. VEX Robotics hosts a broad network of competitions, from which teams can qualify to compete at the state, national, and global level.

Funds you have already raised

The total cost of the program is \$TK. Mr. Olson has been awarded a \$2,000 grant from Excellence in Education and \$1,000 from the ACMS principal. The PTO is hopeful a \$1,000 grant will close the gap. <The wording here is fine. The actual cost to start the program is higher. Hien would have more info on the funding sources being utilized. AO

Describe the need

Mr. Olson has designed an electives course that will give his 7th graders experience designing and building robots. In this class, students will apply science, math, and engineering knowledge to design, construct, and code a robot to compete in the VEX Robotics Challenge. Each year a new VEX IQ challenge provides authentic and engaging learning experience, through the frame of a collaborative competition.

This year's challenge, Full Volume, tasks students with designing a robot that can collect, sort, and transfer blocks of three different sizes strategically to scoring zones. At the end of a one minute match, the robot must navigate over a bar to a parking zone to score its final points. Students will work collaboratively, and creatively, utilizing the engineering design process, to design, build, test, and refine their robot.

This program aims to provide a positive and empowering experience that may prepare and inspire them to join the robust robotics club at Truckee High School, and even pursue opportunities in STEM fields in the future.

Number of Truckee citizens affected

This year, the program will be rolled out to the entire 7th grade class in their ACES rotation—180 students in total. In addition, these robotics kits will enable a VEX Robotics ACES class to be sustained in future years, with a small portion of electronic parts needing to be replaced on an annual basis. We envision this program growing in the future to provide robotics opportunities to 6th, 7th, and 8th graders through ACES, an after school robotics club, and a competition team.