

## First Lenawee VEX Robotics Competition is a Great Success

The Lenawee Intermediate School District (LISD) received a MI STEM Partnership grant for the Lenawee VEX Robotics Competition—Students Learning STEM Workplace Skills. This first-time event was designed by local district Project Lead the Way (PLTW) teachers with the goal of having teams of students design and build a VEX robot to solve the challenge. Through this process, students would increase their engineering skills and learn how to work together—both are important STEM workplace abilities.

As part of this project, the LISD offered a workshop for teachers, “Lenawee ISD PLTW VEX Training” on September 23, 2015. Mike Martus, Regional Support Manager for the REC Foundation, provided teachers with an overview of the VEX platform and assistance with programming robots. Participating districts received a middle school PLTW VEX kit purchased with grant funds. From there, teachers worked with students in class and in after school clubs to design and build robots that could perform the required challenges (also designed by the teachers).

On March 31, 2016, eight (8) local districts convened at Siena Heights University for the competition. The Engineering Program at Siena Heights sponsored use of their facility for the competition so students could interact with college engineering students and faculty and have an on-campus experience. Participating districts



Figure 2 Sand Creek coach, Ed Lyons, and students work on their robot.

included Blissfield, Britton-Deerfield, Clinton, Hudson, Morenci, Onsted, Sand Creek, and Tecumseh.

Volunteer judges included several local district superintendents and staff from Michigan PLTW and the LISD.

Of the many highlights of the day, one is most notable

for the goals of the project. After students competed with their robots, they would immediately bring their team together to make changes to improve their performance in future rounds. This parallel to what happens in the real world of work is right on target in developing STEM workplace skills in these students.

The teachers and students in Lenawee County thank the MI STEM Partnership for its support of this project and plans are already underway for next year’s competition.



Figure 1 The highest scoring team (from Morenci) received this trophy. The trophy was constructed from old computer parts and salvaged materials.