

Major Grant Funds Robotic Programs for WNY Schools

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Thanks to a \$50,000 grant from the Argosy Foundation of Milwaukee, Wisconsin, WNY STEM Hub will partner with the U.S. FIRST® Robotics to launch 25 new student robotics teams in Western New York.

The announcement was made Monday, March 13 at Lockport High School.

Engaging more students in science, technology, engineering, and math (STEM) learning increases their proficiency in these subjects and sparks their interest in meaningful career

options.

"By participating in FIRST® Robotics, students develop their science, technology, engineering and math skills in addition to learning about STEM careers from their mentors. But, most importantly, students will be having great fun," says Michelle Kavanaugh, Ed.D., president of the WNY STEM Hub.

The grant follows the recent publication of the STEM Skills Gap Report by WNY STEM which determined a gap in the regional supply of new graduates to fill in-demand engineering technology jobs. This was corroborated in a new STEM Skills Gap Report from the Public Policy Institute of New York State which stated Western New York will have a significant workforce gap in skilled STEM positions in the next five to 10 years.

"Engaging today's students now will build tomorrow's workforce," Kavanaugh says.

"The skills gap remains a critical economic growth inhibitor issue not only for New York
State but our country as a whole," says Assemblyman Michael J. Norris (R-Lockport). "Since
taking office, I have had the opportunity to meet with a number of business and
manufacturing leaders in Western New York to hear about their needs and concerns. It has
grown increasingly evident that there are thousands of jobs to be had across the region that
would grow industry as well as our economy, but there are not enough skilled workers to fill
these manufacturing needs. Thanks to the WNY STEM Hub and new grant funding, students
in the Greater Buffalo Niagara region will have continued and new opportunities to develop
and grow skill sets that will place them at a direct advantage in a new and evolving
economy."

The new robotics teams will be developed throughout Erie and Niagara Counties and the Southern Tier in Allegany, Chautauqua and Cattaraugus Counties. Special invitations will

be made to urban and rural schools with high need student populations across all grade levels.

Senator Rob Ortt, co-Chair of the Senate's Task Force on Workforce Development, says, "The Robotics programs allow our young leaders of tomorrow to gain valuable hands-on experiences that will open doors to limitless opportunities in today's competitive fields. There is a great support system within the Lockport City School District, and now thanks to this grant, more students will have the chance to further their skill sets to prepare themselves for a 21st century workforce."

Partners from higher education and businesses will serve as mentors.

Kavanaugh continues, "There are a limited number teams in the area with active FIRST® Robotics programs, but the numbers are anemic compared to other regions of the state. This grant allows students, especially those who might otherwise not have access, to participate."

The Lockport City School District has a very successful FIRST® Robotics program. The Warlocks Team 1507 in Lockport will help mentor new teams in the region. This successful program has teams in grades 4 through 12, including hosting regional competitions and serving as a Mentor Team. Sponsored by Mahle, General Motors and Delphi and United Auto Workers 686, the Warlocks are frequent medalists, semifinalists and were regional winner in 2014.

With guidance from Glen Pearson, the Upstate Regional NYS Director for FIRST® and Rebecca Wasmer, the WNY Senior Mentor for FIRST®, WNY STEM volunteers will facilitate start-up by leveraging existing relationships with current FIRST® Mentor Teams, other STEM coalition schools, businesses and community resources, and SUNY Alfred. With assistance from FIRST® staff, WNY STEM will also facilitate additional fund development to

sustain continued growth of this valuable initiative.

The FIRST® program is an immersive learning experience with plenty of teamwork and camaraderie. The structured program requires student teams to design a team "brand," and build and program industrial-sized robots to play a difficult field game. Each season ends with regional competitions. Participating students may also qualify for college scholarships.

This year's regional competition is March 16-18 at the Rochester Institute of Technology. Pearson will host a workshop, tour and opportunity to meet students and mentors for teachers and students who are interesting in learning more.

FIRST© (For Inspiration and Recognition of Science and Technology) was founded in 1989 to inspire young people's interest and participation in science and technology through innovative programs that build self-confidence, knowledge, and life skills. Learn more at www.firstinspires.org.

The Argosy Foundation is a family foundation established by John Abele, a co-founder of the medical-tech company Boston Scientific.

The WNY STEM Hub is a volunteer-driven incorporated organization with more than 600 individual members representing more than 250 organizations in Western New York. It is an initiative of the United Way of Buffalo & Erie County and is affiliated with the national STEM network and the Empire State STEM Learning Network. Its aim is to create awareness and partnerships that serve learners of all ages in accessing STEM/STEAM learning and careers. Further information can be found at wnystem.org.