



Elementary School District 159

Environmental Science Club, 2010-2012

- Climate Change Science Education and Presentations
- Student prepared for and presented at a Student Summit on Climate Change

Science/STEM Club: Middle School, 2011 - 2016

- Participation in ExploraVision Competition, 2014
- Participated in Argonne Lab National Science Bowl, 2013-2015
 - Team placed 5th in 2014; only first year team in top five, 2014.
 - Also competed in Engineering Design Car Competition; 2013-2015.
- Participated in Pringles Challenge, 2014-2016
 - Engineering Design Challenge to mail a pringles chip
 - Excellent ratings on package design and function
- Participation in the Museum of Science and Industry's Science Minors Club
 - Colin Powell and Marya Yates, 2014-2016
 - CSI - Patterns Activities
 - Energy Activities
 - System activities in relation to Space Science
 - Media arts in science
- Lowe's Native Illinois Prairie Garden
 - Working with Lowe's staff through a grant, established an Illinois Prairie Garden
 - Planted and maintained by the students.
- ESP Grant: Energizing Energy Education
 - Provided energy awareness lessons to students in 7th grade
 - Geothermal investigations as a STEM Project
 - Energy Carnival – community event to engage in Energy Education

Underwater Robotics: Colin Powell Middle School; 2011 -2016

- Participation sponsored through the Shedd Aquarium 2011-2014
- Compete in regional Marine Advance Technology Education (MATE) Competitions yearly
 - Placed 1st two years: second and fourth year of participation
 - Placed 2nd third year of participation
- Students learn engineering, buoyancy, circuitry, mechanical engineering and basic build skills.

Underwater Robotics: 5th grade, 2015-2016

- Established a district-wide 5th grade team.
- The same as the middle school, except no use of a camera.
- In house competitions only.

Museum of Science and Industry (MSI) Partnerships

- Students piloted the Future Energy exhibit, 2013.
- Teachers selected to be participants in Teacher Development workshops series
- Participation in the Museum of Science and Industry's Science Minors Club (see STEM Club above)
 - Colin Powell and Marya Yates, 2014-2016
 - CSI - Patterns Activities
 - Energy Activities
 - System activities in relation to Space Science
 - Media arts in science

Mission to Mars at MSI

- Students participated in a pilot program at Colin Powell, 2010-2011.
- Students served as pilot participants of the Mission to Mars Experience at MSI, 2012.
- Students continued to participate in Mission to Mars field trips at the Museum of Science and Industry, 2011-2015

New Science Curriculum Implementation for K-5, 2015-16

- Fully aligned to Next Generation Science Standards (NGSS)
- Digital textbooks
- Hands-on learning labs and activities

Shedd Aquarium Partnership, 2011-2016

- Underwater Robotics Sponsorship, 2011-2014
- Students piloted a virtual learning lab opportunity

Lowe's Five Senses Learning Garden and Greenhouse Project at Marya Yates, 2016

- Plan is to install a working greenhouse to maintain a Five Senses Garden
- Students will plant seeds and monitor the growth
- Student will also participate in the development of a rock garden, as part of the Learning Garden

Project Learning Tree: Grow Labs

- Indoor greenhouses will be used in classroom instruction.
- Students will plant and monitor plant growth.

Schoolyard Habitat Action Grant: Native Prairie Learning Garden

- Students will plant and maintain a Native Prairie Learning Garden