WNY STEM SERVES:
- Schools – Pre-K through Grade 12
- Institutions of Higher Education
- Families
- Business/Industry
- Nonprofits and Community-based STEM Providers
- Economic Development and Workforce Development enterprises

JOIN WNY STEM TO
- Access STEM resources
- Request STEM speakers
- Participate in STEM workshops
- Discover STEM events
- Post/find STEM jobs
- Receive STEM news
- Network with STEM leaders
- Engage in STEM

The Student Spaceflight Experiment Project has given the “Spud Launchers” the possibility to reach not just beyond their community or school, but literally beyond their planet. A partnership with the University at Buffalo provided college level lab work. This project provides opportunity beyond school, fostering love of science and giving valuable experience in real world research and design.

Andrew Franz, Teacher
Hamlin Park Claude and Ouida Clapp Academy

Two of the Student Spaceflight Experiment Program investigators check the progress of their plants with teacher Andrew Franz.

Photo by Douglas Levere, University at Buffalo.

Thank you to our sponsors, their support makes our work possible

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- Wendel
- SUNY Empire State STEM Learning Network
- UB Center for Integrated Global Biomedical Sciences
- United Way of Buffalo and Erie County
- FIRST®
- Argosy Foundation
- Erie 1 BOCES

We welcome corporate participation through program partnership, sponsorship, and general support. Please contact mkavanaugh@wnystem.org.

Two of the Student Spaceflight Experiment Program investigators check the progress of their plants with teacher Andrew Franz. Photo by Douglas Levere, University at Buffalo.

WNY STEM is one of 10 component organizations of the Empire State STEM Learning Network, sharing contiguous boundaries with the Regional Economic Development Council, and is affiliated with the national STEMx network of states. WNY STEM is a member of the national STEM Funders Ecosystems Initiative.
WHY STEM/STEAM AND WHY NOW?

There’s a critical need for trained Science, Technology, Engineering and Math professionals in Erie, Niagara, Allegany, Cattaraugus and Chautauqua counties, where we will lose up to 25% of the current workforce due to retirement in the next decade. In addition to the demand for computer and data specialists, engineers, and scientists to support our growing economic resurgence, the WNY STEM report “Measuring Middle-Skills Occupational Gaps Within the WNY Regional Economy” revealed that we are supplying just 61% of employees needed to fill jobs in engineering technologies for the medical and manufacturing sectors.

Introducing learners of all ages to STEM/STEAM careers is key to sustaining our region’s economic growth and quality of life. Introducing younger learners to STEM helps them form career pathways that lead to college and workplace success in high-demand STEM jobs.

WNY STEM is making a difference for our region, thanks to our sponsors and more than 700 members representing 250+ school systems, colleges, businesses, and organizations.

A SAMPLING OF OUR SIGNATURE PROGRAMS

1. Quality Partner Program – This service is available to informal STEM providers and K-20 educators. We are often asked what STEM/STEAM programs we can recommend. This process assures quality STEM/STEAM learning. Our team of five education specialists use a variety of tools to:
   • help STEM sites reflect on how they can optimize quality STEM components;
   • provide resources and support to enhance your programs;
   • certify you as a Quality Partner for a two-year period; and
   • promote you as a Quality Partner.

2. Progressive Career Exploration Program© – This comprehensive program couples community partners and schools to expose students through progressively richer mentored STEM career experiences in grades 5-14.

3. May is STEM/STEAM Month – We celebrate STEM and the arts every May with a wealth of co-branded school and community programs.

4. Program Series – Monthly programs and networking sessions feature community leaders speaking on workforce development topics, international STEM initiatives, community impact, and new initiatives for educators.

5. STEM Café Program – WNY STEM structures small groups of grades 5-12 students who spend their lunch hour in discussion with real STEM professionals exploring career pathways, academic and the personal skills needed to succeed in STEM professions.

6. Girls Coding Project – In collaboration with AT&T, Girl Scouts of WNY, SUNY Buffalo State, and the United Way of Buffalo and Erie County, WNY STEM facilitates a rich learning experience for urban girls, including a two-week summer experience with real-world projects and women mentor support.

7. Student Spaceflight Experiments Program – WNY STEM facilitates an urban coalition of schools (in 2015 and 2017) engaging grade 5-12 students in designing proposals for micro-gravity experiments, one of which will be selected for launch to the International Space Station.

OUR MISSION

We bring together Western New Yorkers to advance STEM learning in support of our region.

OUR VISION

WNY STEM will be the essential regional conduit for collaboration in advancing STEM learning and workforce development.

OUR VALUES

Collaboration – Partners work together by cooperating in order to achieve mutual gain.
Collective Impact – Partners align their efforts in order to achieve common goals.

Paying It Forward – Partners reciprocate on the benefits they receive from the organization by returning support in order to benefit the organization and its members.

AT&T is honored to be a member of the WNY STEM Hub and proud of our successful collaborations over the past few years to create, support and implement innovative programs that encourage local students to follow a STEM path by engaging them in rewarding immersive technology programs. AT&T aims to remove barriers to academic success, particularly in the areas of science, technology, engineering and mathematics by partnering with great organizations like the WNY STEM Hub, which is a true community asset committed to changing thousands of young lives by equipping them with the tools and skills necessary to excel in both school and their future careers.

– Marissa Shorenstein, President, AT&T New York