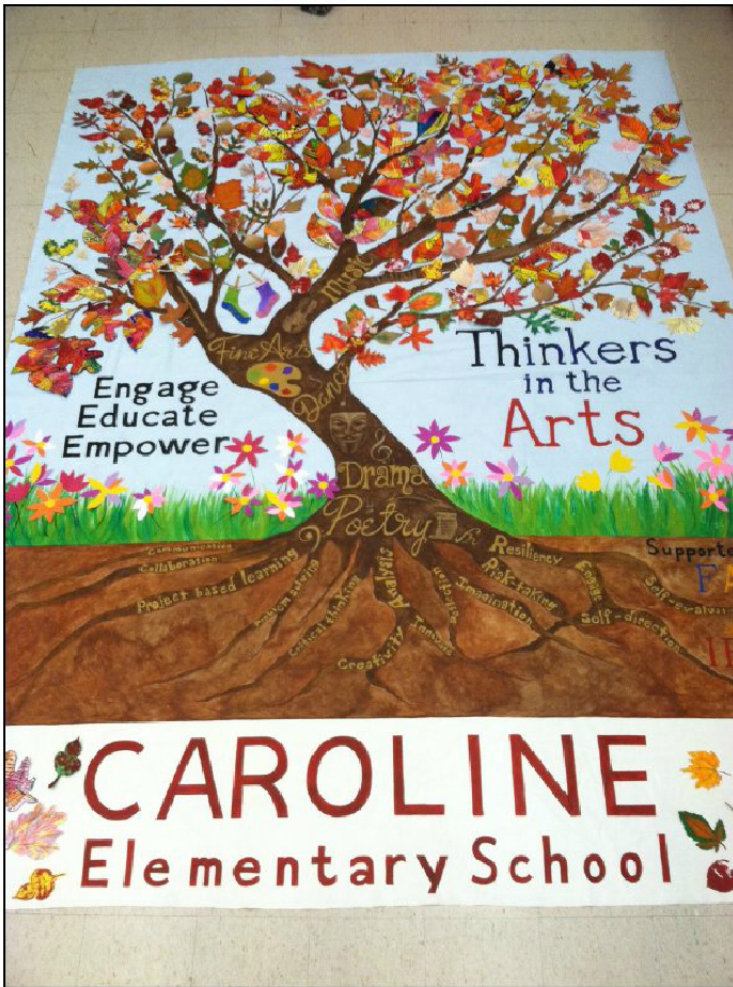


STEAM, ART AND SCIENCE COMBINED FOR 21ST CENTURY LEARNING



The intersection of art and science is important and recognized in the Ithaca City School District. The whole notion of STEM + Art = STEAM is a widely adopted movement initially championed by the Rhode Island School of Design.

Illa Burbank, President of IthacaSTEM Advocates and IPEI's newest affiliate, notes that STEAM is already in action throughout the district. IthacaSTEM Associate Trout in the ICSD Classrooms places cold-water aquariums in classrooms in all eight elementary schools. They combine the science of water quality monitoring, microscopy work, with the artistry of sketching the trout and the streams. In another project, curriculum is being developed for second graders to study flight and engineering design. Activities will include learning, demonstrating and

experimenting with the principles of flight while stimulating the imagination of flight with stories, poems and creative decoration of their flying machines.

Carol Spence, Ithaca High School Art teacher and Fine Arts Department Chair, thinks STEAM when reflecting on the work of the Ithaca High Students in a linocut project funded by the Fine Arts Booster Group (FABG), also an affiliate of IPEI. Carol states, "Visiting artist Sylvia Taylor's whimsical subjects and exquisite relief printmaking technique inspired the students to illustrate their own childhood stories and memories. Sylvia also generously shared her ideation process; how one idea, accident, or "mistake" can lead to original and unexpected solutions." In linocuts, students have to explore the effect of dimension or relief on their images, as well as mirror imaging.

Kerri Burke, art teacher at Caroline, describes the use of a grid and mathematics to create banners. "Students see how their design will be projected and mapped to make large banners for our school. We wanted to celebrate art education and Caroline. These banners, using work of all my art students and pulled together with assistance from artist Mary Beth Ihnken, will be a visual reminder of our learning. We are drawing on all kinds of skills to make this project possible." The banner project is funded by an IPEI Teacher Grant and an FABG mini-grant.

FABG and IthacaSTEM Advocates, as IPEI affiliates, are working to promote the shared district vision to "engage, educate and empower" learners. Science, Technology, Engineering and Math (STEM), combined with art and design, give our students "steam" to move into the 21st century.

