

## **Abstract**

Tompkins-Seneca-Tioga BOCES proposes to partner with Groton Junior-Senior High School to provide professional development to teachers in the integration of technology to access and use relevant and affirming content to engage students in higher-order thinking and problem-solving, and to promote collaborative group learning experiences that embed reflection and goal-setting. A pilot program will be created in which science and ELA classes at the BOCES Career and Tech Center and the Smith School will be paired with the same class (for example 11<sup>th</sup> grade English) at Groton High School. The BOCES CTC provides hands-on authentic learning via the CTE model to a group of students including 30% who have been identified as students with disabilities. The Smith School for Exceptional Education uses differentiated instruction to target learning for all students regardless of their disability. Both programs use best practices which will be shared with general education teachers at Groton High School in co-taught courses using technology to create virtually inclusive classrooms. This pilot will be extended throughout Groton High School and provide a model which will be shared throughout the 9-district BOCES region.

The overall goals of the project are: 1) Improve student academic performance in achieving mastery of the New York State Learning Standards (including Common Core); 2) Increase and enhance the use of instructional technology in collaborative projects among classrooms; and 3) Meet NYS Board of Regents (BOR) goals through implementation of educational technology consistent with the BOR USNY Statewide Learning Technology Plan.

Goal 1 will be addressed as students develop and critique presentations using diverse media platforms and use technology to engage in authentic problem-based learning conducted via virtual collaboration among science classes at different locations. Goal 2 will be addressed through intensive PD focused on integrating instructional technology, including turnkey training to increase capacity and sustain the effort beyond the grant period. Goal 3 will be addressed through the implementation of a virtual co-teaching model that uses technology as a tool for collaboration, communication, research and embedded assessment. The purpose of the professional development is to instruct and prepare teachers and staff to better understand and implement technologies that are currently available at the school districts, as well as new tools available through Google, to enable classrooms to pair up allowing students at two different sites with different demographics to not only become more comfortable with technology but to also collaborate using a research-based approach

To measure student academic performance, we will use both the NYS ELA 11<sup>th</sup> grade Regents Assessment as well as local performance-based assessments to measure mastery of NYS Learning Standards in ELA English Language Arts and Literacy Common Core Standards and Reading Standards for Science and Technical Subjects. Measurement of student engagement, collaboration and use of technology will be conducted using surveys, class interviews and observations as part of the action research program. Teacher collaboration, use of and attitude towards technology and changes in practice as a result of project activities will be measured as self-reported on teacher surveys.