USES OF VIRTUAL ENVIRONMENTS – by Eileen O'Connor, Ph.D.

GRADUATE COURSES: Virtual projects have been used within the courses of Dr. Eileen O'Connor in a variety of ways over the past four years, adding rich context, discussions, presentations, guest speakers, and planning to courses that are 100% online. Within the Master of Arts in Teaching (MAT) Science Center, graduate students meet on a regular basis during science-teacher education courses to work on ways to challenge their K12 students with inquiry-based instruction.   The excellent virtual resources available from islands created by the International Society for Technology in Education (ISTE), NASA, NOAA, and other science and education organizations present opportunities for expanded field trips, for professional development, and for meeting educators from around the world.

FACULTY/STAFF DEVELOPMENT: In an effort to gain more usage of virtual environments, Dr. O'Connor and other Empire State College staff have been developing a virtual affinity group to serve as mutual support in terms of ideas for using virtual locations and sharing training and technology materials.   An affinity group wiki/website has been developed to store information about meetings, uses, and techniques.

K12 RESEARCH: Virtual environments are areas of comfort for K12 students; they often use them in gaming and in virtual interactions. To understand how to work effectively with K12 students in these environments *as learning communities*, Dr. O'Connor created SER/VE, the STEM (Science Technology Engineering Mathematics) Exploratory Real/Virtual Environment) a private, virtual island in which she is testing educational interactions with middle and high school students.   She is beginning to have her graduate students develop science learning experiences for K12 students that have a virtual interface.   Her research area is currently being expanded to work with K12 teachers and students within virtual environments.

Dr. O'Connor has disseminated her work in virtual environments through presentations and publications as available [from this link.](#)