



## **Virtual STEM University: Launching educational enrichment in the Southington Public School System**

**What is the Virtual University:** A web-based instructional environment for educators that offer easy access to innovative lesson design plans in the Science, Technology, Engineering and Mathematics disciplines.

**Objective:** Enhance K-12 curriculum in the STEM disciplines by building daily practice methodologies for teachers to utilize in their classrooms.

- Resource for meaningful instruction
- Easy access as each level will have designated unit activities and lesson plans
- Learning environment will be built by the teachers and uploaded by a webmaster
- Creation of a lesson design plan template for uniformity purposes

**Content:** Lesson design plans that incorporate any of the STEM disciplines into the daily practice of educating our students. Teachers will be shown a model of instruction, via text, video, and other modes, that has been implemented effectively in a classroom.

- Kennedy After-School STEM Academy – pilot program is ready for public consumption and can serve as a design model for launch and load of virtual university
- Thalberg School 4<sup>th</sup>- and 5<sup>th</sup>-grade after-school LEGO program can serve as a design model
- Any lesson plan already in place that incorporates two of the STEM components and thus works as a cross-curriculum experiential learning opportunity for students

## **Role of the Southington Public School**

**System:** Leadership Team launches the build with the webmaster with two units of study at each level. Administration and staff work with curriculum leaders to continue developing content with yearly goals and objectives.



- October 1, 2013 launch for the Virtual STEM University
- Continued discussion and instructional motivation at established SPS staff meetings
- Professional Development days geared toward STEM enrichment in a cross-curriculum manner
- Partnerships with area resources that have a STEM component, i.e., Middlesex CC., Talcott Mountain, Connecticut Science Center, etc.
- Establishment of STEM leaders in each school to facilitate lesson design plan development and innovative classroom programming



## **Role of the Southington Education Foundation:**

Support both financially and communicatively the Virtual STEM Academy in order to continue our mission of instilling a love of learning via innovative initiatives in our Southington public school students.

- Finance the stipend for the Virtual University Webmaster
- Finance innovative STEM programming for our classrooms as suggested/implemented by our local educators – meaning that our grant process will now have a STEM-based component
- Finance STEM-in-residence professionals to support educators in our classrooms with experiential, real-world learning projects, i.e., NASA, LEGO, forensic scientists, environmentalists, energy experts, medical professionals, etc.
- Finance Professional Development training and course work for educators
- Marketing campaign to brand STEM awareness into general public, i.e., specialized STEM logo, website and social media sites, print and electronic news outlets, public speaking campaigns, i.e., PTO and other community leader groups, civic clubs, Chamber of Commerce, statewide and national legislative delegation, etc.