

## Education on Long Island; Part 4

Education on Long Island ; Update on Challenges and Opportunities STEM (Science, Technology, Engineering and Mathematics).

The fourth in a series of presentations focusing on the effectiveness and efficiency of educational programs and projects aimed at attracting more students to scientific and engineering professions and improving the learning outcome of k-12 students who participate in math and science courses was held on March 28 at the LIU Graduate Center. Conclusions, recommendations and information regarding new projects that might be undertaken by the LI Section include:

- Tackle only projects that are doable and can be put into practice on a local as opposed to a national level. Consider endorsing certain national level STEM programs that have proven to be successful.
- New programs to be successful, must be both useful to and wanted by k-12 teachers.
- Projects must relate to and support specific New York State k-12 core standards (nyssed.gov).

Among the ideas presented that go beyond specific course-related projects were these:

- Produce a comprehensive directory/description of ECE jobs, reflecting the types of engineering practiced by members of IEEE Technical Societies. Make available to LI high school counselors as well as to students via on-line links.
- Compile a directory of LI high school science department heads. Publicize LI Section STEM activities to this list.
- Enlist LI Section volunteers to meet with or address k-12 students. Conduct appropriate coaching/practice sessions for these volunteers.
- Adapt the IEEE Amazing Micro Mouse Maze competition to high school level students.
- Leave the development of k-12 programs that require big bucks to the Microsoft's of the world.
- Generate list with online links where students can learn about all the disciplines of the engineering profession.

Links to the NYSSSED standards are:

<http://www.p12.nysed.gov/ciai/cores.html#MST>

[http://www.p12.nysed.gov/ciai/common\\_core\\_standards/pdfdocs/nysp12cclsmath/pdf](http://www.p12.nysed.gov/ciai/common_core_standards/pdfdocs/nysp12cclsmath/pdf)

<http://www.p12.nysed.gov/ciai/mst/pub/elecoresci.pdf>

<http://www/p12.nysed.gov/ciai/pub/intersci.pdf>