

How do you arm a STEM Teacher with real-world application examples?

## Put an Engineer in the classroom!

In the 1990's, *Eastman Kodak Company* jumped the gun, starting a family of STEM initiatives, years before the Government coined the STEM acronym. The name of these programs was the *21<sup>st</sup> Century Learning Challenge, (TCLC)* and at our peak, we were 1500 engineers and technicians, visiting *Rochester City School Classrooms*, twice a week for two-hour visits, during the entire School Year. This effort continued for nearly six years, and not only pre-dates our recent STEM excitement level, but delivered support on a scale we have yet to match. The program leveled three independent attacks on inner-city education; *Classroom Visitations*, totaling nearly 1 million man-hours; *One-on-One Mentoring*, involving more than 300 Students; and a *Teacher/Technical-Worker Exchange Program*, involving 75 teachers, and lasting 5 weeks, every summer.

Many of the volunteers in these programs were, and still are, members of the *Rochester Engineering Society (RES)*. In the intervening twenty-five years, many have retired, or are about to retire. That makes them even more available as STEM Coaches, than they were as Kodak employees.

The *RES* is working to put technical people in K-12 Classrooms, throughout the Greater Rochester area, as STEM Coaches. Their presence will:

- Help the Teacher stay current with our ever-changing technology
- Provide real-World Application Examples, making whatever is being taught, real enough to be remembered
- Support the teachers with not only the delivery of STEM concepts, but perhaps more importantly, the design and delivery of STEM related hardware.



The *RES* Volunteer Coordinator worked as a STEM Coach, doing Classroom Visitation at School #3 for the 2014/15 School Year. That was so successful that RCSD is interested in expanding this program to involve six STEM Coaches this year. The Principal at *HFL Primary School* has a family of four Engineers supporting STEM efforts.

As part of the Mentoring wing of the *TCLC*, there was a student, who, as a 5<sup>th</sup> Grader, wanted to be a Paleontologist. His mentor gave him this kit of a Pteranodon, and found the outline of all the parts in the box; so they scaled the "bird" up to life Size (21 ft. wingspan).



The *RES* is specifically seeking Retired, Technical people, (Engineers, Technicians, Machinists, Entrepreneurs or anyone whose work would allow them to visit during School hours), as STEM Coaches. It deserves mention that there are also several STEM initiatives that need volunteers outside of School hours. The *RES* Goal is to support all of these out-reach programs.

We have scheduled meeting for:

**Thursday, November 5<sup>th</sup> at**

**7:00 p.m., at the**

**RMSC, 657 East Avenue,**

where the goal is to connect STEM coaches with Teachers and Upstate Schools. We have more than 30 immediate openings, and the need is growing exponentially.

Please visit <https://fingerlakesstem.wordpress.com/> for additional information, and [Click here to register](#) for this meeting.

You should attend this meeting if you have any interest in supporting STEM Delivery in Upstate NY, and to get details on what it means to be a Classroom-Visitation *STEM Coach*. Teachers and School Administrators are also invited. Please bring a friend who might be interested in STEM Support!

For more information contact:

Jon Kriegel

Volunteer Coordinator - *Rochester Engineering Society*

STEM Coach

cell: (585) 281-5216

[jkriegel@rochester.rr.com](mailto:jkriegel@rochester.rr.com)