Volunteers sought for STEM in schools

ERICA BRYANT COLUMNSMIST

In the early 1990s, Eastman Kodak sent employees to volunteer in Rochester School District classrooms through a program called the 21st Century Learning Challenge. At the program’s peak, about 1,500 engineers and technicians were mentoring students, helping teachers stay current with technology and demonstrating real-world applications for math and science.

Jon Kriegel, a Kodak retiree and TCLC alumnus, is looking for volunteers to help resurrect and expand the model. Kriegel is the volunteer coordinator for the Rochester Engineering Society and the organization’s president-elect.

The society is seeking volunteers with science, technology, engineering and math skills to volunteer at local schools. An informational meeting will take place at 7 p.m. Thursday at the Rochester Museum & Science Center, 657 East Ave.

Volunteer opportunities include classroom visitsation, STEM coaching, Project Lead the Way support and assisting with FIRST Robotics teams. Kriegel hopes that former TCLC volunteers might be nearing retirement age and have more spare time to spend in classrooms. Anyone who is available for brief periods during the school day is welcome.

Scientists, engineers and researchers can help enhance the classroom experience by presenting real-world applications for what kids are learning, said Kriegel. They can say, “Here’s where I used this ridiculous piece of trigonometry that she’s trying to teach you, and this is why it was important to the world,” he said.

For more information, call Kriegel at (585) 281-5216 or go to fingerlakesstem.wordpress.com.

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STEM teachers benefit from engineers in classroom

COLUMNSMIST

Jon Kriegel

H ow do you arm a science, technology, engineering and math teacher with real-world application examples? Put an engineer in the classroom.

In the 1990s, 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 21st Century Learning Challenge, and at our peak, we were 1500 engineers and technicians visiting Rochester school classrooms twice a week for two-hour visits during the entire school year.

This effort continued for nearly six years and not only predated our recent STEM excitement level, but delivered support on a scale we have yet to match. The program levelled three independent attacks on incivility 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 five weeks every summer. Many of the volunteers in these programs were, and still are, members of the Rochester Engineering Society.

In the intervening 25 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 Rochester Engineering Society 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 that makes being taught real enough to be remembered, support for the teachers with not only the delivery of STEM concepts, but, perhaps more importantly, the design and delivery of STEM related hardware.

I worked as a STEM Coach, doing classroom visitation at Nathaniel Rochester Community School No. 3 for the 2014-15 school year. These visitations were so successful that the school is interested in expanding this program to involve six STEM Coaches this year.

The Rochester Engineering Society’s goal is to support all of these outreach programs. The principal at Honeoye Falls-Lima primary school has a family of four engineers supporting STEM efforts.

The Rochester Engineering Society is specifically seeking retired technical people such as 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 several STEM initiatives that need volunteers outside of school hours. The Rochester Engineering Society’s goal is to support all of these outreach programs.

We have scheduled a meeting at 7 p.m. Nov. 5 at the Rochester Museum and Science Center, 657 East Ave., 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 fingerlakesstem.wordpress.com for additional information, and to register for the meeting.

Teachers and school administrators are also invited. For more information, contact Jon Kriegel, volunteer coordinator, Rochester Engineering Society STEM Coach, by calling 585 281-5216 or emailing jkriegel@rochester.rr.com.