**K-12 STEM Committee Region 1 Report 2016**

Worcester County Section Desiree Awiszio is working with MathAltitude that has students from K-12. That means visiting classes with the older kids. She has been talking to both junior and senior high kids about engineering on multiple visits. She has also gotten the WPI Student Branch involved with this outreach. The section is in process of submitting her for the IEEE USA Engineer Educator award.

The New Hampshire Section champions STEM education, collaborating with New Hampshire colleges and universities in technology-related fields. They support STEM education at all grade levels.

Region 1 is slated to be involved in the TISP initiative. This is the Teacher in Service training Program and there are plans to do a train the trainer followed by Region 1 Sections going into school districts to offer STEM sessions. I have spoken with the committee to check with headquarters for assistance to make sure IEEE has set things up properly with states like New York to be properly listed and certified to provide these sessions to the school districts.

NSPE and MSPE have STEM outreach efforts and I continue talking with them about partnering with IEEE USA on some programs. They have been very involved in Science Fair judging as well as Math Counts.

I have worked with Parallax Corp and they are very active with teacher outreach to help bring electronics and robots into the classroom. They also host hands on workshops in CA. They had a program to provide a free robot kit to teachers requesting them.

I have been working with Microchip and hope to be able to offer free or discounted Curiosity Demo Boards to teachers via their outreach program. The software including the MPLABS development environment and the C compiler are available at no cost and run on Windows PCs, Linux PCs and Apple computers. There are several intro videos on the Microchip Web site.

There are lesson plans that are available at TryEngineering.org that have been developed by IEEE volunteers and fit the curriculum frameworks directly. Materials needed in the classroom for these are very low cost and are eligible for funding from the micro grant program.

**IEEE USA K-12 Stem Committee**

I attended by call in a meeting for K-12 STEM held in Cary NC. The charter change does not fund the liaison members from the Regions to attend any of these meetings face to face and I felt using the limited Region budget to attend this meeting is not a good use for these funds. Some funding from the micro grant program will be used in support of the STEM US Science and Engineering Festival in Washington DC held each year.

The micro grant program is still in place and any teacher / IEEE Engineer partners can request small amounts of money to help with STEM activities in the classroom. This is a very simple application process that is a rolling application date. The funds cannot be used for capital equipment but can be used for the smaller things like consumables needed for classroom projects. All our representatives should be presenting this information to all teachers we are working with. <http://www.ieeeusa.org/volunteers/committees/pec/teacher-grants.html>

Please ignore the reference to 2013 as these funds are released as requested and approved and there is funding available currently.

There is still s the IEEE USA Educator / Engineer Partnership Award. The deadline to submit for this year is September 9 and will not be extended. I want to encourage all sections to submit for any engineer/educator teams in their sections.

The committee is supporting the mission of the IEEE Move van for its outreach to schools and educational events showcasing IEEE and our STEM initiatives. This is one of 2 missions along with helping during disaster relief efforts.

The charter for the IEEE USA K-12 STEM Committee changed last year. There is a larger committee consisting of two groups. One group will be a representative from each Region appointed by the Region Director with their participation being via teleconferences and email unless the Region covers their travel expenses to attend the face to face meetings. The second group will consist of members appointed by the committee initially chosen from existing members that are willing to stay on. This will allow for the needed continuity to accomplish longer term projects. These members will be funded by the committee for the face to face meetings and the projects they are working on.

If the Region wants their representatives to attend Region meetings the Region will be responsible for those expenses. The Region 1 budget for K-12 STEM should be revisited to allow for participation of the Region 1 representative at the meetings if we want better representation and input.

Currently the Committee membership is as follows:

Joe Burns, Chair, Gary Blank, Vice Chair, Dusty Fisher, Past Chair, Adam Fontecchio - committee member, Suresh Vadhva - committee member, Marc Apter - committee member, Mauro Togneri (VP), Ken Reid (committee member), Jeffry Handal (Young Professional Committee Member), Sohaib Qamar Sheikh (EAB representative), David Iams - IEEE-USA Staff.

Unfunded members:

Larry Nelson (R1), Matthew Iglesias (R3), Steven James - Region 4 liaison member, Jaclyn Sanders (R5), William Dehope (R6) liaison member

Larry G Nelson Sr.

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Region 1 PEC chair

K-12 Stem Literacy Committee Liaison Member