

Remember STEM as you craft your unit's Annual Program Plan

Posted on August 27, 2014 by Bryan Wendell in STEM

Richard Stone won't rest until every Scout unit includes STEM elements in its regular monthly program.

But he doesn't think you should have to wedge STEM in with a crowbar.

Instead, the education and training leader of the BSA's National STEM/Nova Committee says, it's easy to integrate STEM activities into the fun you've already got planned for your Scouts and Venturers.



And if you happen to earn some Nova awards along the way, even better! Dr. Stone, who has two degrees in physics and earned his Ph.D. in materials science, shares more below.

Integrate STEM activities into your unit's Annual Program Plan

A wise trainer once explained to me that an active troop doesn't have to *plan* to work on Camping, Cooking and Hiking merit badges — earning those are a side effect of an active program.

What a great idea.

This is the time of year that most units develop their Annual Program Plan. Include activities that are fun, challenging and exciting. Support advancement, and maybe help Scouts earn awards.

Look for opportunities to integrate STEM and Nova activities into your Annual Program Plan.

In Cub Scouts

Last year at a Blue and Gold banquet, I watched a group of Webelos cross over to Boy Scouts. They all earned several activity pins like Scientist, Engineer and Geologist — and also the *Science Everywhere!* Nova award. The Webelos leader explained that after the boys earned their Arrow of Light advancements and some activity pins, the natural follow-on was to work on a related Nova award.

They had the time, and the Scouts were interested.

A counselor who is also very active in her pack extended the idea further. Many of the activities for belt loops or activity pins naturally extend into Nova award activities.

Why not group them together: do the belt loop activity and the Nova activity as a set?

When working on the Forester activity pin, take a field trip to look at local trees. Measure the height of a tree, and the Cub has earned part of the *1-2-3 Go!* Nova award. You could easily work several related activities together in a month or two of meetings with the same theme.

In Boy Scouts

Integrating program activities works for Boy Scouts too. Many Scouts earn Canoeing, Motorboating, or Small-Boat Sailing merit badges at summer camp.

Why not expand on those to work on the *Start Your Engines!* Technology Nova award?

If the troop participates in a STEM camporee and finds some of the activities fun, find a merit badge or Nova award that explores those topics.

The lesson I learned long ago for Camping, Cooking and Hiking also applies to science, technology, engineering and mathematics.

Great program is built with activities that lead to fun and advancement. Integrate related activities to enhance your program.

Every Unit Needs a STEM Coordinator - Job Description

The specific job responsibilities can be flexible depending on Unit needs but typically involve:

- Be knowledgeable of the Nova Awards program
- Promote the Nova Awards program at Unit meetings to the Scouts and parents/leaders
- Help Scouts with ideas on how they can earn the Nova and Supernova awards
- Work with leaders (youth and adults) to add fun STEM activities to meetings and outings or STEM Moments
- Be aware of all STEM and Nova activities offered by local, regional and national Scouting organizations
- Be aware of STEM programs offered by local non-Scouting partner organizations
- Connect youth with a Nova counselor or Supernova Mentor

This may require:

- Contacting the local council to see who is registered as Nova Counselors and Supernova Mentors
- Recruiting Nova Counselors and Supernova Mentors as needed
- Ensuring Nova Counselors and Supernova Mentors are properly registered and trained
- Serving as the unit contact person for all things STEM related

Qualifications

The Unit STEM Coordinator must be registered as a member of the unit committee and must be current in Youth Protection training. The coordinator need not be a STEM expert, although comfort with STEM material would be helpful.

HOW TO GET STEM STARTED IN YOUR UNIT - *Get in on the FUN!*

1. Make sure you get a copy of the NOVA award book (Cub Scout, Boy Scout, and Venturing books) for your unit or per youth - sold in the local Scout shop or at scoutstuff.org
2. Any adult in the unit can help "Counsel" the youth on the NOVA level awards / approved by unit committee and following Youth Protection Guidelines
3. Review the Award worksheets at this [LINK](#)
4. Recruit an adult to be the Unit STEM Chairman (STEM professional background optional)
5. Get familiar about the NOVA program resources on this website and at scouting.org/stem
6. Recruit adults with a STEM background to be Supernova Mentors. They will need to apply thru the District STEM Chairman or District Advancement Chairman with this [FORM](#). Forms are turned in to the Scout office.
7. Find online training for STEM Counselors, Mentors, and for general information at this [LINK](#)
8. Supernova Mentors nearby can be found on the [Merit Badge Directory](#)
9. Turn in awards timely at the Scout Shops - Advancement Report form
10. Catch up with your District STEM Chairman to find out more about local resources (see list at bottom of page)
11. Attend Roundtables to learn about STEM resources
12. and lastly check out the cool STEM events taking place around the Council