

MAY – A DEEPER DISCUSSION ON STEM

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AMY: Welcome, everyone to the May CubCast. I'm Amy Hutcherson, Webelos Den Leader and International Scouting Program Specialist.

AARON: And I'm Aaron Derr, Cubmaster and Senior Writer for *Boys' Life* Magazine. So, listeners, you may remember an episode from a couple of years ago on the STEM program.

AMY: And Tinia Graham – apologize if I don't pronounce your name right but, we did receive this via email – she remembered and contacted the CubCast mailbox with some pretty specific follow-up questions.

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AMY: And so, we invited Supernova Mentor, Teresa Colletti, back to the show. Teresa has been an active BSA volunteer since 2009, and currently serves on the Greater St. Louis Area Council STEM Committee. She has led multiple STEM training sessions at Pow Wows, STEM Camps, and other venues. Welcome back to CubCast, Teresa!

TERESA: Well, thank you. It's great to be here.

AMY: Help us remind everyone what STEM is specifically and what is the BSA's focus with STEM?

TERESA: STEM specifically, is Science, Technology, Engineering and Math, and the BSA focus and what I'm here to talk about is the STEM Nova program. STEM has always been a part of BSA from its very inception with compass and map reading, chemistry, geology. Back in 2010, BSA was approached by ExxonMobil because they were unable to hire enough STEM professionals that were American citizens. So, ExxonMobil came to BSA and said, "You're a foremost developer of youth. Could you help us get some youth interested in STEM?" The youth love STEM programming; their parents love it too. It lets both sides of that see that there's more to BSA than camping. It's giving today's youth STEM literacy and survival skills for the future.

AMY: Wow. That's fantastic.

AARON: So, like you said, STEM, Science, Technology, Engineering, Math. What's the difference between science and technology?

TERESA: By definition, science is the pursuit of knowledge generally for knowledge's sake and technology is the use of science to design and invent items to improve life. So, science would be the understanding of physics or forces, but technology would be using that knowledge to build a roller-coaster.

AMY: Really? Teresa, how does the STEM program fit in when it comes to our rank advancements for Cub Scouting?

TERESA: The STEM Nova program is a wonderful supplemental program for Cub Scouts. It's available for Wolves, Bears, Webelos, Arrow of Light. The STEM Nova program is not available for Lions or Tigers. And while it's not part of advancement for Cub Scouts, we find that many dens and packs use the STEM Nova program to supplement pack meetings and den meetings after the youth have earned the ranks or for a fun change of pace. It gives a youth a chance to do a really cool STEM exploration without being in class or having the meeting turn into a school lecture.

AARON: When does a STEM mentor or counselor get involved and what's the difference between a mentor and a counselor?

TERESA: A NOVA counselor is a registered adult over the age of 21 that has some understanding of STEM. They work with the youth over a short period of time - a couple of hours, a day or two - to help guide them to earn a NOVA Award. A Supernova Mentor is a registered adult age 21 or older with STEM training. They don't need to hold a STEM degree, but they should be using STEM on a daily basis. So the Supernova Mentor works with the youth on an individual basis following YPT to earn a Supernova Award. I've had the opportunity to work with Cub Scouts anywhere from three months to 14 months for them to earn a Supernova Award.

AMY: We know our, our Cubmasters and our Den Leaders want to use their resources wisely, so can someone mentor an entire unit?

TERESA: Well, yes and no. Someone can mentor the individuals in a unit but the Supernova Award is truly an individual award. So, the group can work on Adventure Loops together, which are Requirements 1 and 2 in both the

Cub Scout-level Supernova Award, or speak with a teacher in a group about the importance of STEM, which is Requirement 5, but they need to be completing the research on the scientist, Requirement 3 and 4, individually, and the experiment, Requirement 8, on an individual basis.

AARON: So, for the Supernova Award, a, a mentor is required. How does a Cub Scout leader find one? Does the mentor have to work in a STEM-related field?

TERESA: Your council or the leader's council should have a listing of Supernova Mentors and either the council's STEM Chair or the Advancement Chair would have this listing. The district may also have a listing. Each council is a little different on how they do that. And if the council does not have Supernova Mentors, the Den Leader can go to the council next door and ask them for help. In today's world you can also mentor youth long distance through the Internet, making certain that you're following Youth Protection Training and have a parent or guardian present. I'm excited to say that very soon the National STEM Nova Committee is going to have online training available at My.Scouting.org that will allow those councils without an active STEM Nova program to have their volunteers receive the training they need to be a counselor of a mentor.

AMY: STEM is very exciting, and I know that our listeners are really going to want to reach out and look for resources, so Teresa, help us to know where to look to find resources on the STEM activities and the awards that can be earned.

TERESA: The best place to look is MyScouting.org, and then the second place to look for kind of an immediate update will be the STEM Nova Award BSA Facebook page. Both of those are two very important resources. Not only are all nine Nova's listed; there's a also a Unit Guide for Cub Scout Leaders on how to implement STEM in their unit. I would also encourage leaders to consider using websites that have .edu or .gov as resources, because we find those to be some of the best resources available. NASA has a fabulous set of lessons that can be used for youth as well.

AARON: Awesome. Well, is there anything that we haven't discussed regarding STEM in your unit that you'd like to share with our listeners?

TERESA: There are so many things. Let me try to narrow it down.

AARON: Let's do it.

TERESA: STEM Nova is truly a wonderful way to supplement what you're doing in your unit. When I was a Den Leader, we did most of our STEM-related pack meetings after the Blue and Gold. Instead of participating dropping off because the youth had already earned their rank and were distracted by spring, and all those other things that happen, they came back, brought their siblings, brought their friends, because they wanted to build a construction paper rocket or catapults and slingshots. Also want to let everyone know that we are working at new Nova's, so the National Committee is working to add new Novas. Youth are not restricted to just earning four. Right now, there are nine Cub Scout Nova's and Webelos at the level Nova's, and there are more on the way, so I'm very excited to share that news. And finally, thank you. I personally cannot say thank you

enough for giving me the opportunity to share the message and also to talk about the benefits of STEM for our youth and for the BSA. It's not just a fun supplement to our current rank system; it's very important to the future of our country as well.

AARON: Very cool.

AMY: Yes, absolutely. Well, Tina, we hope you're listening. We're pretty sure that covered just about everything for you and for our other listeners as well. Teresa, thank you so much for joining us on CubCast.

TERESA: Thank you.

AARON: And before we get to Reminders and Tips, let's check out the May Safety Moment.

(May Safety Moment - Insurance)

AARON: And now for the timely Reminders and Tips. This is a busy time of the year for planning outings, so be sure your unit has adopted the Risk Assessment Strategy. Check out the BSA Health and Safety website for all the tools you need to assess risk.

AMY: As a bonus tip, it's recommended that Cub Scouts obtain permission slips from parents before going on any outing. Also, you should be recruiting your Popcorn Kernel or other fundraising coordinator right about now. The Committee Chair is the person responsible for appointing someone for this important role, but if you know somebody who'd make a great candidate, go ahead and pass that selection along to your Committee Chair. if you

know somebody who would make a good candidate, go ahead and pass the suggestion along to your Committee Chair.

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AMY: But now our May CubCast comes to an end. Thanks to our guest, Teresa Colletti, for joining us.

AARON: And thank you for listening. Now can we ask you one small favor? If you have a Twitter account, or if you don't have one, create one, and tweet us your Scouting leadership position to @cubcast. This way we can tailor these podcasts specifically for your needs. Until then, I'm Aaron Derr.

AMY: And I'm Amy Hutcherson. Join us next month as we prepare for School Nights. We'll see you then.

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