

Eastern



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News from the Chair

Fall 2012

“Dog Days Are Over”

Paul Nooney, Jr. - Eastern STANYS Chairperson

Email: nooneypa@gmail.com

There is a song by the band Green Day called “Wake Me up When September Ends”. I think about this song at the start of every school year. Some of you dread this time of year. Thoughts of putting away your beach towels and taking out your dry erase markers makes you want to cry. Others look at September as a time to start fresh. You look forward to meeting new students and teaching them all about what you have come to know and love about science. However you look at it, it’s the start of a new school year. If this is your first year teaching, congratulations and good luck with your new career! If you are a returning teacher, welcome back! I hope that this school year proves to be your best yet!

The first thing I want to do is to give a great big thank you to our former Eastern Section chairperson, Steve Fielman. For many years he has dedicated himself to STANYS and I know I have very large shoes to fill as I step into the position of Chair. Don’t worry though, Steve isn’t going that far. He still remains

on as the STANYS Intermediate DAL and I’m sure you’ll still see his smiling face at all of our local STANYS events. So on behalf of everyone here in the Eastern Section, THANK YOU STEVE!

Now on to who I am. I am not a new face to the Eastern Section by any means. I have served on the Eastern Board of Directors for several years as both the Earth Science SAR and the Vice-Chairperson. As I step into a new role here at STANYS, I also am stepping in a new direction with my career as an educator. For seven years, I taught Earth Science in several districts around the area, but after losing my job twice, have decided to pursue a new educational path. I have started work on my second master’s degree at The College of Saint Rose in College Student Services Administration. So as you sit reading this newsletter, thinking of the start of a new school year, think of me sitting in the Saint Rose library reading a grad school textbook and writing a response paper. Brings back memories I bet?

However, as I think about how exciting a new career is going to be, I also can’t help but think about all

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1st Eastern STANYS Happy Hour on the Hudson River!



It was a great evening.

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the other teachers out there who have recently fallen victim to the budget ax. I can't help but think about my counterparts in the teacher education program who are going to be entering the workforce at a time when people hear the word teacher and say, "Oh it's not a good time to be going into that field. I hope you have a backup plan." Take it from someone who knows and has been there more than once, it's SCARY! This is where I think being a member of an organization like STANYS sets you apart from others. As you are out on the job hunt, potential employers will see that you are a member of this professional organization (or any professional organization for that matter) and know that you have committed to going beyond just the hours set forth by your contract. They know you will be attending conferences and have the resources behind you of thousands of other science teachers from across the state. So at a time where one teaching position can literally draw thousands of applications, having STANYS behind you can help to give you a professional edge that really isn't found elsewhere in New York.

Now what about teachers who are currently in the classroom? What can STANYS do for you? As we all know, science is an ever changing field, both in what happens in the world around us, and what we are told to do by the "powers that be" at the state. As we get set to implement the common core standards in science teaching, I don't think there has ever been a

time as important as this to be a STANYS member.

When the new standards are rolled out (I'm purposely not saying when since the dates seem to be ever changing as well), you can turn to STANYS as a resource for how to use and connect these new standards with what you do in your classroom. One of the things that STANYS SARs are currently working on are lesson plans that will relate to the new common core standards. We're not sure yet how those are going to be presented (online, at the conference in Rochester, etc.) but, being a member of STANYS will make sure you have access to them.

However easy or hard the transition is, you can be sure STANYS will be there to help you. As for the ever changing world around us, we can help with that! I am always impressed with the number of professionals that take time out of their busy schedules to present at our local and state conferences the latest and greatest in the science world to our members. From Albany NanoTech, to the DEC and National Weather Service, I know people who attend our conferences come away with knowledge and activities that they can directly apply in their classes. With that, hopefully, we will inspire a future generation of scientists. So regardless of your current situation, being a member of STANYS will help to enhance your career as an educator. If I didn't believe that, do you think I'd still be a member? If you already are a member of STANYS, thank you! I now ask that you encourage your colleagues around you to join. If you are not a member, I ask that you give us a

try. I promise you will not be disappointed.

Save the Date!

This year's 31st Eastern
Section Conference at
Siena College
is scheduled for

Friday, October 12, 2012

Look for the brochure and
registration form in this
edition of the newsletter.

Hope to see you there!

CHALLENGER LEARNING CENTER OF THE GREATER CAPITAL REGION



The Challenger Learning Centers' internationally recognized diverse classroom programming and community outreach programs are designed to excite students' curiosities in STEM education using a space-based theme. Innovative teacher training workshops give instructors a deeper understanding of how to teach the subjects of science and mathematics, as well as confidence that the programs they are using are content-rich and consistent with current scientific understanding. All Challenger Center programs are developed by

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staff educators and space scientists to ensure accuracy in content and methods of instruction.

At the core of each Center are two simulators, consisting of a Space Station, complete with communications, medical, life sciences and computer science equipment, a space lab and a mission control room patterned after NASA's Johnson Space Center. **Our center will have a third simulator, a space ship transporter experience that transitions the student astronauts to and from the space station simulator.**

All of the programs conducted at Challenger Learning Centers utilize the same robust educational model that emphasizes educational content, cooperative learning, problem-solving, responsible decision-making and experiential learning.

The Challenger Learning Center is being built in partnership with the Schenectady Museum and Suits-Bueche Planetarium on 155 Nott Terrace Heights, Schenectady, NY 12308. This partnership allows for an enhanced Challenger Learning Center experience augmented by a related museum program. A Cooperative Services agreement has been established with BOCES and Questar for financial support. Also, funding will be available from the Challenger Learning Center to defray the cost of busing to the center.

The Challenger Learning Center will be open for classes in February 2013. If you are interested in your

class participating in a Challenger Learning Center Mission or for more information, please contact Norm Miller at (518) 864-7073. Please visit us at our information booth and workshop at the STANYS conference at Siena College in October. Please visit us at www.challengerlearningcenter.org

Greater Capital Region Science and Engineering Fair

Joan Wagner, Fair Director

Email: jsw2012@aol.com

www.gcrsef.org



The Greater Capital Region Science and Engineering Fair will take place on **March 23, 2012 at**

RPI. This Fair is affiliated with the *Intel International Science and Engineering Fair*. It is also a regional fair for the *STANYS State Science Congress*. There are two divisions. The senior division is for grades 9-12 while the junior division is for grades 6-8. Students do original research in one of the STEM disciplines. Many awards are offered at the regional fair. Winners in the senior division go on to compete at the Intel International Science and Engineering Fair, all expenses paid, in Phoenix, AZ, May 13-17th. Over \$1,000,000 in awards were given out last year at the International finals. Some of you may have read about the overall winner, a 15 year old student from Maryland, who developed a simple

test for early detection of pancreatic cancer, a disease that is normally not detected until stage 4, when it is often fatal. His invention may have some application for early detection of ovarian cancer too. Winners in the junior division are invited to compete in the national Broadcom Masters competition.

When students do original research, they are immersed in the science process, obtaining a much richer sense of what science is all about. Science research supports the vision for the *Next Generation of Science Standards* because it is inquiry based.

The fair website is www.gcrsef.org. Go to this site to learn more about the fair. The website will be updated in late August to early September. If you would like more information about the science fair, feel free to contact the fair director, Joan Wagner, jsw2012@aol.com.

Time for a Do-Over: The Earth Science Network

Becky Remis, Earth Science
Director-at-Large
E-mail: remis@aol.com



Image retrieved from:
<http://brainjabber.wikispaces.com/>

I first joined the Earth Science Network as a new teacher in the mid 1990's, which was the last time we were faced with new science standards and curricula that would impact the teaching and assessment of science. I remember meeting on several

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occasions with other ES teachers - some weathered, some new - sharing activities and lessons, labs and ideas, and pouring over the new Core Curriculum. Since then I've had the pleasure of co-facilitating the ESNNet with retired teacher extraordinaire, Arden Rauch, and with the support of the Greater Capital Region Teacher Center. In the last ten years our email list has grown to well over a hundred ES teachers, college faculty, and other interested folk who have joined us on field trips and lectures, often paired with social outings and a time to decompress and unwind.

In the last few years the group's activities have waned. Arden still keeps us up-to-date with local events and news we should pay attention to, as this is the most valuable (and least intrusive) benefit of joining the ESNNet. But our funding has dwindled to, well, nothing. Along with this, the burden on everyone's time as classroom teachers has only increased. But I would argue that the ESNNet is needed now more than ever.

For here we are again, almost 20 years later, facing another potential change to science standards, and therefore science curriculum, instruction and assessments in NYS. How will we adapt? What resources are available to us? How can we support each other? The ESNNet is a professional learning community of sorts, allowing its members to be passive receivers of information (thank you Arden) or active members who attend field

trips (Greenport Quarry, Howe's Cavehouse Museum and Quarry, Helderberg Workshop, Petrified Sea Gardens, Schenectady Museum Planetarium, Stark's Knob), lectures (at Union College and the NYS Museum), tours (behind the scenes at the NYS Museum, the NWS facility, Tang Museum exhibits, Golub's green facility), and meetings with colleagues to share best practices on topics of their choosing.

If any of what I've described sounds of interest to you, then please consider joining the Earth Science Network. It's as easy as emailing Arden Rauch at raucha@union.edu or me (rremis@aol.com) to join this FREE, informal, and informational group. If you are already a member, no need to contact us unless something has changed. We will be organizing trips and meetings this year, and while attendance is optional, all are invited.

The first meeting will be at Schalmont High School on Tuesday, September 25th from 4-6 pm in room 46. Topic: Sharing of SLOs. Refreshments provided. Please RSVP at rremis@aol.com.



Have You Been BaP'd Yet?

**Arden R. Rauch, SAR
Environment**

Email: raucha@union.edu

If your school does not have a BaP recipient (Point of Contact) of electronic information from NSTA

(National Science Teachers Association) or SED (State Education Department) as yet, please consider becoming that person. If you can't, please let your science chair or principal know that your school is not receiving vital and timely information about science opportunities for professional training and updates as well as information generated by SED.

For detailed information about BaP, the tasks of the Point of Contact for your school, and the opportunity to volunteer, go to www.nsta.org/bap or for more information contact me at raucha@union.edu

Intermediate

**Jennifer Gecewicz, Intermediate
SAR**

Email: jgecewicz@stthomas-school.org

Some people are born with what I'd like to call the "organization gene". I was not so lucky, genetically speaking. I need to work at it. (By the way, I am *still* working at it.) In my teaching experience, I have come across many students that don't know what to do to get organized. They are lacking a system. They may have the newest pens, folders, and notebooks that fit their personality, but they don't know how to use them to help them stay organized. If you also have a middle school student, or perhaps several, that don't know how to get organized, perhaps the system my team and I created for our middle school students will work for you.

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The system was put into place for the entire middle grades this past spring. Each student in grades 6, 7, and 8 will be using the same system. No guess work. No whines of “how come that grade doesn’t have to do it”. It is uniform and consistent. Once the students are used to the system, they can keep track of things for each class in the same way, which helps them feel more in control of their environment. (And if I know anything about middle-schoolers, they want to have control over something.) Two other factors that make this system great are that it actually costs less per student to buy the supplies for this system than our previous list of supplies. And once trained, so to speak, students know how to be organized in each of their classes. It is simplified for them and gives them a great tool to use when they are on their own in high school. It gives the students a great starting place, one they may want to maintain or tweak for themselves in high school.

The supply list to the right was taken directly from our letter to parents at the end of the 2011-12 school year. It only includes the supplies required for the system to start. The Student Binder Use Guidelines were also given to the parents at the end of the year and will be gone over with students in depth in September. They are also included in the box on the right. While I realize that this may not be useful to put into place for the 2012-13 school year, think about starting it for the 2013-14 school year. And feel free to make the

changes you need to make it work for your students. If you have any questions, feel free to email me jgecewicz@stthomas-school.org and I will be happy to try to help. Good luck and Happy Organizing!



Supply List for Binder System:

Please remember that some items will need to be replaced or replenished through the year.

1. 3" white, Avery Durable slant D ring binder with a front pocket, clear inserts on front and back {While this binder may seem gigantic, remember that it is replacing 4+ one to one-and-a-half inch binders they would have carried before.}
2. Avery heavy duty plastic dividers- 8 pack assorted colors {Plastic is key. It is much more durable for middle schoolers.}
3. 3 Ring pencil pouch {This will hold a few of the pens, pencils, protractor, compass, and calculator they need to carry to their classes, while eliminating the extra bulk of a pencil box.}
4. 3 Hole punch and ruler combination that can be placed in the 3 ring binder {Having their own hole punch eliminates the need for the teacher to punch holes in everything.}
5. College ruled loose leaf paper {Self-explanatory}

Student Guide for Binder and Planner Use 2012-2013 School Year

Students will be given a planner at the beginning of the school year. In an effort to help the students stay organized, develop better time management skills, and stay abreast of their assignments, both short term and long term, the following will serve as a guide regarding its use.

Make the planner part of your daily routine.

- Students will bring their planner to each class.
- Students must have their planner initialed by the teacher to leave the classroom to use the restroom.

Fill in your assignments as soon as you learn them.

- Students will log each new assignment in the appropriate location in their planner.
- Students will log in their assignments using the same symbols as the binder system.
- Students will log in long term assignments on both the weekly calendars and monthly calendars.

Learn to use backward planning.

- Students will log in a reminder the week before a big assignment is due [i.e. test, project, and presentation].

Assignments will be logged into the planner using the same method as the binder system.

- Each student will have a Log Sheet in the beginning of each section of their binder.
- Students will add any new logs to their log sheet, as specified by their teacher, when the log is written on the master Log Sheet in the classroom.
- Students will record the specific naming policy given to each log.
- Work done on the Google Suite will be logged in the Log Sheet as well.
- Long term assignments will be logged into the Log Sheet and will also be logged into the planner in the following way:
 - i. The Log # will be written in the planner on the date the assignment was given.
 - ii. The student will draw two small arrows into each day following the assignment through the date, including weekends.
 - iii. The student will draw a star or asterisk on the date the assignment is due.
- Friday's will be Binder Check Days during each class. Students will compare their Log Sheets to the Master Log Sheet to ensure that they are not missing any materials or logs.

Put everything in your planner.

- Students may log in extracurricular commitments [e.g. clubs, practices, vacations] to help with time management.

Do not remove items from the binder until the teacher indicates it is time [i.e. the end of the unit, quarter, trimester, etc.].

Yet More Email.....NO!

Arden R. Rauch, SAR
Environment

Email: rauch@union.edu



If you want to be notified about local science related opportunities in as few words as

possible, sign up for Earth Science Network (EsNet) or Environmental Science Network (EnvNet) by sending me an email:

rauch@union.com I promise to remove your name whenever you yelp.

Announcements are succinct and carefully selected, and you do not have to teach either Earth or Environmental Science. If you are already on the list, and about 100 folks are, you're all set.

Attention High School Teachers:

Register now for the fall session of Adopt-a-Physicist!

Consider participating in Adopt-a-Physicist this fall, a free program for high school physics classes hosted by the physics honor society Sigma Pi Sigma. Adopt-a-Physicist connects high school physics students to real physics graduates who are eager to share their stories. Working in areas ranging from particle physics research to freelance writing, the participating physicists embody a huge range of

careers, backgrounds, interests, and educational levels. Adopt-a-Physicist connects classes with the physicists of their choice through online discussion forums that are active for a set three-week period. Each physicist can only be "adopted" by up to three classes, making lively, in-depth discussions possible.

Learn more at

<http://www.adoptaphysicist.org/>. For more details on the program and ideas for incorporating it into your physics class, browse the resources for teachers, available at <http://www.adoptaphysicist.org/webdocs/TeacherPacket.cfm>. Teacher Registration is now - September 12 (or until full).

Nice Opportunity to Collaborate



Image retrieved from: <http://technorati.com/technology/article/why-cant-collaboration-technology-get-any>

Arden R. Rauch, SAR
Environment

Email: rauch@union.edu

Since this is an opportunity for integration of subject areas, please share the following with English and history teachers.

To commemorate its 50th anniversary, ECOS: the Environmental Clearinghouse (ECOSny.org) is sponsoring a contest for students in grades in 9-12 in the four Capital

District Counties. Students are asked to submit a 500 word, or less, essay on one of the following topics:

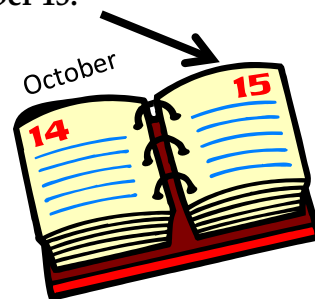
- **What Does Green Mean to You?**
- **Why should I care?**
- **Environmentalism Began with Rachel Carson and Now it's Your Choice to Continue.**

The first prize will be publication in the ECOS Bulletin with a copy for each person at the Annual Rachel Carson event held at SCCC on October 29th. (Check the website for details).

The essay will also be posted on the website and a certificate suitable for framing will be presented.

Second prize winner will receive a certificate and be published on the website.

Entries must be submitted by October 15.



PHYSICS

Paul Federoff, Physics SAR
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Are you right back in the swing of things, like you never left for the summer? By this time in your career you might be pretty set in your ways and each year could be like the previous one with just

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different bodies in the classroom. Why not make this year different? If you are pretty well set with all your physics concepts, then look for a new way to teach one, some, or all of them. Your Eastern Section of STANYS can help, I'm sure of it.

I know there is some topic that you are convinced that the kids just don't get, ever. Well, what better way to work on it than with fellow local physics teachers? Keep reading for all the opportunities that STANYS has to offer.

Are you new to teaching physics? Did you just get handed a section and are not sure what to do with it? Keep reading for all the resources that your Eastern Section can provide.

To those that have been in it while, why not share what you've learned? I know you've found some great way to teach a difficult topic. Don't keep it all to yourself. If you don't feel like being a presenter at a conference, then how about at least letting us know what you would like to see at the next conference?

If you forgot, or never knew, the Eastern Section has its local Conference at Siena College on October 12. There are always workshops for physics teachers available each session. Last year the Siena physics faculty ran a few workshops. They showed off their equipment that is available in their lending library as well as a bicycle-powered generator. If you came to my session last year, you would have learned how to easily

incorporate a lab or two using semiconductors into your existing circuits unit. There were also great sessions for intermediate level physics, which can be very helpful as well.

This year there will be sessions involving STEM, CCELA, NGSS and any other acronyms you might need to know. I will be running a workshop using common toys and games to teach physics. There is even a session where you walk away with a free Geiger counter! Sign up and come on over for some meet-and-greet, informative workshops and some pleasant dinner with fellow professionals. You are guaranteed to come away with something useful in your classroom. You can't beat the price and location. Future newsletters will let you know what you missed if you don't make it.

I'm sure you are familiar with the State Conference in Rochester each November. If you've never gone, then make this the year to go. Joining the Eastern Section of STANYS is the same membership as the state level. There are always several physics workshops offered every session and you are guaranteed to learn something new. At the very least, you should make some contacts with teachers from around the state. Maybe they are not local but then again everyone is accessible with the technology at our disposal these days, just twitter our Director At Large, Gene Gordon or check out STANYS on Facebook.

As your Subject Area Representative (SARs), I try to keep our local physics teachers

connected. NEPTUNE (North East Physics Teachers: Understanding, Networking, Educating) met once again this past spring. This is another great way to meet with fellow physics teachers. Maybe we'll plan a field trip this year? Look for announcements in upcoming newsletters for future dates and locations.

If you aren't a member of the AP electronic discussion group, you might not be aware of the proposed changes to the APB course in the future. Besides the listserv changing into an online community, the current course is still the same for at least the next year or two. Nothing is certain after that, though we should have two years of notice before anything drastically changes. The proposed change was for a two-year course, parts of both years would be needed to adequately prepare a student for the Regents. Hopefully, we'll still have an AP B course that fits nicely in a high school student's schedule. Maybe more APC will get offered? You might want to brush up on your calculus.

Save the date, October 27. This is the NYSS-AAPT fall meeting in Poughkeepsie. If you are not a member of NYSS-AAPT, you should consider that as well. Again, future newsletters will keep you informed.

If you are thinking way ahead, the Eastern Section also has Lab Day in March. A great place to share a lab, or pick up a new one, or maybe just a new twist to an oldie-but-goodie.

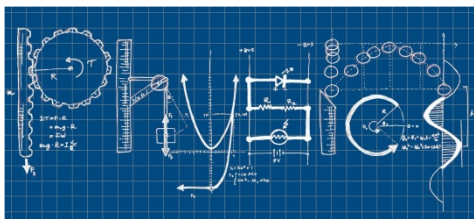
By this point in the newsletter, you

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have probably come across reasons to join STANYS so I won't push that point. The state level of STANYS also publishes a Science Bulletin twice a year that is full of great ways to teach science. Their website is also continually being revamped to give members more access to more and more information. Just keep in mind; this will be the first and last newsletter you get from the Eastern Section and from the State Level if you are not a STANYS member.

Hope to see you at one or some of these events.



Retrieved from: <http://www.mscd.edu/~sps/>

Earth Science

Fran Lohnes, SAR Earth Science
Email: fflohn@gmail.com

Welcome Back!! When I hear these words, I ask myself, "Where has the summer gone?" I then look back to when I made a list of things I wanted to accomplish with 10 weeks ahead of me, not writing lesson plans or grading papers, and ask "did I accomplish what I set out to do?"

So, to answer the quintessential back-to-school question "What did you do during your summer vacation?" My response involves a 1400 mile drive from Seattle to L.A.

with my husband. Our first stop was Mt. St. Helens.



Retrieved from: http://en.wikipedia.org/wiki/Mount_St._Helens

It was a long drive but well worth the trip even though it was rainy, 48°F and we couldn't see the crater. We then drove the Oregon coast from around Newport going south along Highway 101 where the volcanic and sedimentary rocks were spectacular. Next we drove through amazing post-glacial sand dunes for approximately 140 miles followed by a drive through the Redwood Forest ... WOW!!! We then traveled along the coast to San Francisco, Monterey and Carmel. Big Sur was next. There are no words to describe this, just try to imagine mountains meeting the ocean. We ended our trip in L.A. spending time with our son.

After I returned from the west coast I spent 3 days participating in a workshop in Keene Valley with the geologists from the New York State Museum, looking at last year's landslide as well as metamorphic and sedimentary rocks in the area.

Upon reflection, I traveled and learned about West Coast geology and brushed up on my New York State geology. I relaxed and decompressed from last year's events, so now I'm recharged and ready for the many challenges that lie ahead in this school year.

So I ask ... What did you do during your summer vacation and did you accomplish what you set out to do? Enjoy and have a great school year!! Remember to join us at Siena on October 12 and in Rochester on November 4, 5, 6.

You Want Me to Read WHAT?

Becky Remis, Membership Chair
E-mail: rremis@aol.com

"The Citizen who wishes to make a fair judgment of the question of wildlife loss is today confronted with a dilemma. On the one hand conservationists and many wildlife biologists assert that the losses have been severe and in some cases even catastrophic. On the other hand the control agencies tend to deny flatly and categorically that such losses have occurred, or that they are of any importance if they have. Which view are we to accept?"

Do you know the author quoted above? The basic sentiment of this passage, written in 1962 (there's your hint), could apply to any of a number of today's pressing environmental issues, from groundwater depletion and mineral resource allocation to hydrofracturing and global climate change. The author's question is also timely, and one our science students should be grappling with in our classrooms as we help them develop the critical thinking skills of scientifically literate citizens.

Which view to accept? Scientists make claims, as Rachel Carson did in *Silent Spring* (in case you hadn't already guessed), which can have

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profound and far-reaching impacts on the decisions we make for ourselves, other organisms, and the environment. The evidence that supports or refutes those claims is what students need to investigate, argue, discuss and debate in order to become well-informed consumers of scientific information. Our jobs as science teachers are to provide students with the opportunities to engage in these activities. Reading about the scientific claims of the past and the evidence gathered to support them can be a first step.



The Common Core ELA Literacy Standards for Science/Technical Subjects

(http://www.corestandards.org/assets/CCSSI_ELA%20Standards.pdf) encourages us to use both informational and literary text to engage our students in the content and process of science. Carson's book presents a claim, the evidence to back it up, and the all important answer to "why should I care?" A further look at the life of the author (an intensely private person) and how her work spawned an environmental movement (still alive today) is a history worth investigating in the science classroom. Carson's life and book also provides us with a peek at the nature of science and how scientific understanding develops. It also

shows us what a very messy – and very human – undertaking science really is.

So, why not have your Environmental Studies students read Silent Spring, The Double Helix for Living Environment students, Deadly Glow: The Radium Dial Worker Tragedy or The Disappearing Spoon in the chemistry classroom, or Longitude and The Planets for Earth Science students? Better yet, read it with them, uncovering the history of science and how it can change our lives.

Elementary

Kate Perry, Elementary SAR
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It's September! Excited elementary students rush to our classrooms, ready to learn and share their knowledge. As teachers, we also benefit from learning and sharing our knowledge. My challenge for this summer was to explore computer programs geared toward multimedia student presentation. My 4th and 5th grade class will be focusing on honey bees this fall; their life cycle, environmental and ecological connections, physical characteristics, hive structure, and habits, patterns and preferences. As they observe, ask questions, and create their own research projects, they'll document with photos, videos, drawings, and writing. I want my students to create presentations using tools on the web, but they are easy enough to use, and free. Edutopia recently posted a page that made sorting through the multitude of web based programs easier:

<http://www.edutopia.org/tech-to-learn-free-online-resources-video>.

The Big List of Free Online Tools was exactly what I needed! Programs to make storybooks, animations, drawings, comic strips, and videos, many with demonstrations and examples, populate the list. I'm planning on having my students use Little Bird Tales (<http://littlebirdtales.com/>) to get them started. Students will also be posting to the science class blog, allowing them to easily update the greater school community about our honey bees. Their scientific research and findings will be published!

STANYS also continues to provide opportunities to add to our knowledge base. Our Eastern Section Siena Conference on Oct. 12 offers physics, STEM, and literacy workshops geared toward Elementary teachers. I'm presenting "The Power of Water: A Waterwheel STEM Challenge", a curricular unit engaging students with science, math, literature and history. The STANYS Rochester Conference in November (11/3 to 11/6) will be rich with Elementary targeted workshops on Sunday Nov. 4. Common Core Standards and Next Generation Science Standards workshops and correlated lessons are also on the presentation docket. I hope to see you at both conferences!

Other venues for professional development are The Schenectady Museum, <http://www.schenectadymuseum.org>, the State Museum, <http://www.nysm.nysed.gov/>, and

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The Cary Institute,
<http://www.caryinstitute.org/index.html>. NSTA and PBS also offer many online PD opportunities.


Next Generation Science Standards are currently in the 2nd draft. NSTA has a website to help us stay informed <http://www.nsta.org/>

[about/standardsupdate/](http://www.nsta.org/about/standardsupdate/). STANYS will be here to help you navigate upcoming changes. I look forward to serving as your Elementary SAR for the 2012-2013 school year. If you have questions, ideas, or comments to share, please e-mail me at perry.kate23@gmail.com. It is going to be a great year!

Become a Member... Stay a Member

Becky Remis, Membership Chair
E-mail: rremis@aol.com

It's that time again - time to tell you the benefits of membership in STANYS, and encourage you to either join or to continue your membership. So... what can STANYS membership do for you? Here's our top ten list:

- #10. **Prestige:** founded in 1896, it's the oldest professional science teaching organization in the country, and your membership looks good on a resume.
- #9. **Professional Development:** the highest quality professional development at the Siena Conference, Spring Lab day at St. Rose, and the statewide conference in Rochester targets your needs by improving your instructional practice and content knowledge.
- #8. **Professionalism:** Membership in STANYS not only provides evidence for your APPR, it's the right thing to do as a *professional* science teacher at a time when few see us that way.
- #7. **Networking:** face to face conversations at content-specific meetings for teachers of Physics, Earth Science, Environmental Science, and Chemistry keep you in tune and in touch.
- #6. **Information:** STANYS leaders meet with NYS education department members on a regular basis, so news about assessments and teaching requirements is passed along to members like you.
- #5. **Standards:** STANYS leaders on the NYS Achieve, Inc. committee keep you up to date on the potential adoption of Next Generation Science Standards and how they will affect what you do in the classroom.
- #4. **Leadership:** opportunities to become a leader as a SAR (subject area representative), Section Director, or elected officer on the Eastern Section Board can help you reach your full potential as a contributing member of the profession.
- #3. **Fun:** our first ever spring social gave members a chance to unwind and relax with fabulous refreshments and new friends.
- #2.  **Fred:** he's not the chair - or the president - anymore, but he's still around to make us laugh!
- #1. **Savings:** all this is yours for the taking -- for a reasonable membership fee that keeps the organization going strong now and into the future.

If you are STANYS member, we thank you for your unwavering support. If you are not yet a member, please join the ranks of some of the best science educators around. We need YOU to share your expertise, your experience, your insights, and your commitment to quality science education for all students. Become a member... Stay a member.



Chemistry

Maria Russo, Chemistry SAR
chemlady302@yahoo.com

Another school year has begun and many of you are probably asking yourself what is going to happen to our Chemistry Core in the year ahead. A crystal ball I do not have but I do believe that the exam in June will still be what we are used to administering. So we move ahead in the directions that we know and think about how we can make it better than last year.

That being said, how about addressing something we know for certain that our students come to us with, misconceptions. The one I'd like you to think about is the Scientific Method and where it fits

in the teachings on Nature of Science.

This summer I ran across an article from the May 2011 Journal of Chemical Education entitled. "Using the Activity Model of Inquiry to Enhance General Chemistry Students' Understanding of Nature of Science." The article addresses many ideas but the one that caught my attention dealt with the misconceptions our chemistry students have with the Scientific Method. I then starting thinking about (the one chore I never looked forward to as school began), grading lab reports and how I could change a lab report format to make it more real life. Real scientists do things like draw pictures, repeat procedures that have been tweaked, and talk to each other. Can our

students do that??? Of course they can!

If you do not have access to the "Journal of Chemical Education" use Google to search for William S. Harwood's model for inquiry. The author describes his model using a biology lab but don't let that put you off. To teach your students this new way to look at what scientists really do, use the model as described then transfer what the kids learned to do a chemical activity.

For those who are willing to give this a try, I'd love to know how you and the students made out. Email me at chemlady302@yahoo.com and I can share the results.

Welcome Back!!

If you have any questions or concerns regarding your particular branch/level of science please feel free to contact your STANYS Eastern Section Subject Area Representatives:

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Vice-Chair - Collette McCarthy stanys.mccarthy@gmail.com

Chemistry - Maria Russo - chemlady302@yahoo.com

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Earth Science- Fran Lohnes - fflohnes@gmail.com

Elementary - Kate Perry: perry.kate23@gmail.com

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