

CWS-STANYS Annual Workshops and Dinner

Thursday, March 4, 2010 – Nazareth College of Rochester

3:30 – 4:30 Registration and Refreshments – Smyth Hall, Third Floor

4:30 – 5:30 Session A

Smyth Hall and Golisano Academic Center - Rooms to be posted

#1 CSI Owl Pellets: An Integrated Science, Math, ELA, Art Unit (Elem: K-12)

Alexander Johnson, Abelard Reynolds School No. 42

This workshop offers a hands-on experience to dissect an owl pellet, reassemble the skeletal remains and identify the victim...we know who the killer was! You can easily modify the provided lesson plans to meet the instructional level of your students and their individual learning styles. NYS learning standards and correlation to the subject areas of Math, ELA, Art and Social Studies are provided. Teach the students about food chains, food webs, predator, prey, adaptation and the digestive system with this high interest unit. Yellow CSI tape and hand lenses provided!

#2 Science on Seneca – Exploring the Lake Environment (8-12)

Sheila Myers, Finger Lakes Institute and CWS Environmental SAR

This session will be a brief introduction to the Science on Seneca program, an EPA award winning environmental education program. The Science on Seneca is based out of Hobart and William Smith Colleges and allows teachers and their students to explore the lake environment on-board a 65 foot research vessel, the *William Scandling* on Seneca Lake in Geneva NY. Students use state-of the art equipment to collect data on the chemistry, biology and physical attributes of the lake. The costs for the program are minimal - \$15.00/class and the teacher training is free. The next teacher training is April 17th.

#3 Engaging the Middle School Student in the Intermediate Level Science Curriculum (5-8)

Rebecca Scott, Greece Athena Middle School, CWS-STANYS Intermediate Level SAR

In this workshop, participants will receive and partake in activities in all areas of Intermediate Level Science- Life Science, Earth Science, and Physical Science. All of the lessons shared will be hands-on and student centered. The activities are standards-based and help students to grasp concepts on the ILSPET. Participation is a must!

#4 Integrating Science and ELA (Elem)

Jennifer Baxter, Palmyra-Macedon Primary Grade 2 and Primary Science Lead Teacher

Integrating science during ELA time has many benefits. It increases comprehension and retention of science concepts. Content reading comprehension skills and strategies for responding are developed and practiced. Explore how science readers and trade books can become part of your balanced literacy program. Take away ready-to-use ideas for comprehension and vocabulary.

#5 Social Networking Tools & the Science Teacher (K-12)

Gene Gordon, DAL Physics, NBCT, Fairport High School

Twitter, Delicious, Ning, Skype and Facebook are fast becoming indispensable tools for a teacher who wants to increase their Personal Learning Network. Teachers of all grades can connect with other teachers and professionals of all the sciences. Learn how to easily connect with and take advantage of the vast resources of the online educational cloud.

#6 Inquiry Teaching Nuclear Chemistry (Chem)

Peggy Warren, Kendall Jr. Sr. High, Vice-Chairperson and CWS Chemistry SAR

Lab activities, worksheets, PowerPoint and a web quest will be used to explore inquiry teaching of Nuclear Chemistry. This is a complete unit, ready to use in the classroom.

#7 Hold Your Wee for a Wii: A Problem Based Learning Unit on Water Intoxication (L.E.)

Kathy Hoppe, Monroe 2-Orleans BOCES, DAL Biology and Lynn Ocorr, Canandaigua Academy, Biology Mentor
During this session, participants will learn about a PBL created in order to teach students about Osmosis and Diffusion as it relates to a real world situation. Multimedia, Literacy and an inquiry lab are involved in this PBL.

#8 Using POGIL Activities to Teach High School Science (HS and Admin.)

Kristina Lantzky, St. John Fisher College, Assistant Professor of Chemistry, St. John Fisher College and Robert Dayton, STANYS Retiree DAL and Chemistry teacher Rush-Henrietta HS, retired

Process-Oriented-Guided-Inquiry-Learning (POGIL) is an active learning method used in high school and college science classrooms. In this session you will experience a POGIL classroom. We will also provide information on POGIL activity development and assessment.

#9 The 5-E's: A Research-based, Constructivist Teaching Sequence Based on How People Learn (K-12)

Dr. Peter Veronesi, The College at Brockport, Jessica Nenni and Paulette Kealy, The College at Brockport

Participants will experience a science lesson using the 5-E model. Follow up discussion will focus on implications to your science teaching and deep science understanding leading to science literacy.

5:45 – 6:45 Dinner – Forum, Otto A. Shults Community Building # 21

7:00 – 8:00 Session B

Smyth Hall and Golisano Academic Center - Rooms to be posted

#10 The 5-E's: A Research-based, Constructivist Teaching Sequence Based on How People Learn (K-12)

Dr. Peter Veronesi, The College at Brockport, Kelly Hobbins, The College at Brockport

Participants will experience a science lesson using the 5-E model. Follow up discussion will focus on implications to your science teaching and deep science understanding leading to science literacy.

#11 Engaging the Middle School Student through Science Projects (5-8)

Rebecca Scott, Greece Athena Middle School, CWS-STANYS Intermediate Level SAR

In this workshop, participants will receive student-based project ideas. Project topics include: Mendelian Genetics, Global Warming, Ecology, and a mid-term or year-end summative project focused on vocabulary assessment. Paper copies of the projects will be provided and electronic versions are available on request.

#12 2010 Earth Science Reference Table Share-A-Thon (Esc)

Michelle Ebert, Greece Arcadia High School, CWS-STANYS Earth Science SAR

Stressed over having to make up all new worksheets to the new reference table? How about sharing what you have done and getting something new from somebody else. This is a Share-A-Thon session. Participants are asked to bring worksheets, labs etc. that incorporate the new reference table. Please bring 20 copies to share with your peers.

#13 Misconceptions in Science (All levels)

Robert Dayton, STANYS Retiree DAL and Chemistry teacher Rush-Henrietta HS, retired

This session will illustrate some misconceptions students have in science using a demonstration and video. There will also be a group activity to explore student misconceptions, and a discussion of how teachers can develop activities for students that will correct misconceptions.

#14 Teaching Science and Math Through Microscopy and Magnification (K-5)

Liam Casey, Ph.D., University of Rochester Life Sciences Learning Center and Angela Ferris, M.S., School 54 Flower City Community School

In this workshop three sample lesson plans will be presented that incorporate charts, pattern recognition, and the scientific method while exploring the hidden world all around us using microscopes. You'll also hear about our program in which scientist volunteers interested in teaching can lead these lessons at area schools.

#15 You can Use a Service-Learning Project to Teach the Benefits of Good Nutrition within Class, Interdisciplinary Classes or Community Partners (Elem, 5-8, College)

Sheila Brady-Root, Chairperson and College SAR, CWS-STANYS, Nazareth College

A workshop designed to facilitate teaching good nutrition through the "New Pyramid" connecting eating habits, wellness, and fitness for students living active life styles. Teams will develop activities to use in science classes during the workshop.

#16 NASA and the Science Classroom (K-12)

Gene Gordon, DAL Physics, NBCT, Fairport High School

Come learn how to access all that NASA has to offer in the way of lessons and materials. Starting NASA MESSENGER lesson plans, you can begin to collect lessons designed for teachers K-12. These inquiry lessons are Standards-based and filled with an emphasis on reading and communicating science concepts.

#17 The Visual Learner (7-12)

Maureen Russell teaches Grade 7 Science, Environmental Science, and Scientific Illustration, a third year science elective, at Naples High School.

Use students' interest in art to engage them in science education! Learning outcomes can be brought to life through these colorful visual/spatial activities. Explore hands-on classroom projects that reinforce science concepts and content, including metric measurement.

#18 Are Your Students (and Teachers) Energy Smart? Solar Savvy? (K-12)

Bill LaBine, NYSEEDA Energy Educator

Our highly interactive, hands-on lessons show energy efficiency, economic impact and solar power solutions. K-12, come engage, get free materials.

#19 Cholera Epidemic and The History of Rochester's Quest for Clean Water Supply (Middle – H.S.)

Sheila Myers, Finger Lakes Institute and CWS Environmental SAR and Janet Siegel, Science Teacher, Rochester CSD School Without Walls

This program will involve a historical overview of water-borne disease epidemics and the quest for clean drinking water in our nations' cities. The case example will be the City of Rochester and the outbreak of Cholera in the mid-1800s. Participants will examine how the outbreak of Cholera in the 1800s led the City on a search for safe, clean water from the Finger Lakes.

#20 Chemistry Regents Review Share-a-thon (Chem)

Peggy Warren, Kendall Jr. Sr. High, Vice-Chairperson and CWS Chemistry SAR

Are you struggling to come up with new ideas to help review for the Regents exam? Together we can work to improve student outcomes. Participants are asked to bring 20 copies of their favorite review activity or worksheet to share.