

**Hawai'i Science Teachers Association
Fall Conference
September 14, 2013**

Session 1

Barb Mayer*, Amala Posey**	*Seasonal National Park Service, O'ahu, **Grand Canyon National Park
<p><i>Distance Learning Opportunities with Grand Canyon National Park</i> (E, M, H, I)</p> <p>The Environmental Education staff at Grand Canyon National Park has the capability to conduct interactive classroom presentations through distance learning video conferences. The programs are curriculum-based (designed to meet national teaching standards), are appropriate for a variety of age ranges and are free. Come find out about this opportunity to bring The Canyon into your classroom!</p>	
Art and Rene Kimura	Hawai'i Space Grant Consortium, University of Hawai'i
<p><i>Education for the Human Made World: Scholastic Robotics in Schools</i> (E, M, I)</p> <p>The Next Generation Science Standards incorporates engineering, technology and the application of science. Robotics provides a tool that makes abstract concepts concrete, allows for project based, hands on learning with measurable outcomes, and develops critical life skills of teamwork, time management, and problem solving for students. Learn about the various available scholastic robotics programs including the new VEX IQ, and those used in classrooms from simple toothbrush robots to the newly introduced ARTEC programmable robots. Make your own BrushBot and program and operate an ARTEC robot and receive free ARTEC science samples.</p>	
Dan Bent	The ReadDch STEM Reading and Writing Program
<p><i>Increasing STEM Knowledge and Interest Through ReadDch Reading</i> (E, M, H, I)</p> <p>At no cost to your school bring the ReadDch STEM Reading and Writing Program to your school to enhance those threshold skills while exposing students to STEM subjects and careers. ReadDch provides the curriculum training to your before and/or afterschool staff and lends 1 copy of each book per student to read-along. The typical ReadDch student will have read books valued at approximately \$500 per student each year. ReadDch follows an extremely successful (data presented at workshop) curriculum in use for over 20 years.</p>	
Michael Ida	Kalani High School
<p><i>Leveraging Technology in the Math and Science Classroom</i> (M, H)</p> <p>How can real classroom teachers incorporate technology into their lessons under less than optimal conditions? Small apps can make a big difference in the math and science classroom. Find out what works and how to leverage whatever tech resources you have to enliven your lessons and increase your effectiveness.</p>	

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Mark Heckman	OCEANIA Chapter of the National Marine Educators Association
<i>Marine Field Trips, Resources, and Opportunities</i> (E, M, H, I)	
Join us for a hands on session that includes a round (sea)robin of marine activities highlighting field trips, resources and and opportunities in Hawaii for educators. We will do marine science activities sponsored by the Hawaii Institute of Marine Biology, the Waikiki Aquarium, Maui Community College, the Hawaiian Islands Humpback Whale National Marine Sanctuary, the Teaching Science as Inquiry Program and more.	
Maggie Prevanas	NOAA Climate Stewards
<i>NOAA Climate Stewards, Be the Change</i> (E, M, H, I)	
Interested in making a difference in the world around you? A collaborative presentation from Hawaii Climate Stewards will help you decide to become part of this solution oriented group.	
James Redmond, Arnold Feldman, Lauren Kaupp, Barbara Klemm, and Frank Pottenger	Curriculum Research & Development Group, College of Education, University of Hawai'i at Manoa
<i>Acceleration Due to Gravity</i> (H)	
An exemplary hands-on inquiry activity from the new PP&T, Practices in Physics and Technology! This presentation and activity will explore and investigation in which students determine acceleration due to gravity and engineer an object with an acceleration less than g. In the PP&T curriculum, students develop an understanding of concepts through laboratory investigations of physical phenomena.	
Ethan Allen & Lori Phillips	PREL
<i>Picturing Science</i> (E, M, H, I)	
Participants will explore science content, key practices, and cross-cutting elements through engaging in and learning about the processes of Picturing Science – see http://picturing-science.prel.org/ . This informative and enjoyable session will explicitly teach how to use hands-on, minds-on activities of observational drawing and language to actualize the Next Generation Science Standards in classrooms	

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Session 2

Jim Foley	C-MORE
<i>Exploring Ocean Circulation Through Experiments, Activities and Oceanographic Data (M, H)</i>	
<p>The ocean conveyor belt is the major system that transports heat and nutrients in the Earth's ocean. This session will introduce a series of lessons developed by the Center for Microbial Oceanography: Research and Education (C-MORE) designed to engage students and allow them to access the same data scientists use to understand the ocean conveyor belt. Through hands on activities, teachers will get a fast paced introduction to two lessons that involve modeling ocean structure and circulation. All of the lesson and materials presented can be borrowed from free from locations throughout Hawaii, are aligned with HCPSIII, and are easily integrated into the classroom (http://cmore.soest.hawaii.edu/education/teachers/science_kits.htm).</p>	
Kim Strong	Elementary Science Olympiad
<i>Elementary Science Olympiad Coaches Workshop (E)</i>	
<p>Our first annual Elementary Science Olympiad tournament will be April 26, 2014. Those who attend this workshop will receive a coaches manual that includes everything you need to know to start a team.</p>	
Polynesian Voyaging Society	Polynesian Voyaging Society
<i>Hokule'a Worldwide Voyage (E, M, HI)</i>	
Andy Barnes	HaSTA
<i>Lessons from San Antonio – HaSTA Ambassador to NSTA Conference (All Levels)</i>	
<p>I am the lucky recipient of the HECO sponsored trip to the NSTA conference in beautiful downtown San Antonio this past April. I will share my experience and present some of the ideas and resources I found helpful. I also have door prizes!</p>	

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Session 2

Scott Laursen	University of Hawaii at Manoa, Dept. of Natural Resources and Environmental Management
<p><i>Teaching Change to Local Youth: Phenology, Climate Change and Citizen Science at Hakalau Forest</i> (M, H)</p> <p>Phenology is a powerful indicator of climate change impacts, and also provides a unique opportunity for experiential education. We developed a two-day curriculum for local middle and high school students focused on linking phenology, conservation biology, and climate change at Hakalau Forest NWR. Each month students visit Hakalau Forest NWR to: (i) learn about native forest ecosystem ecology, including disturbance regimes and the general concept of change; (ii) learn about human-induced climate change and its potential impact on native ecosystems; (iii) measure plant phenology and publish these data with the USA National Phenology Network; and (iv) participate in native forest bird research. The basic curriculum could be easily replicated elsewhere in Hawaii, and we hope to discuss and encourage this outcome.</p>	
Roger Kwok	Leeward Community College
<p><i>What is this stuff good for and when am I ever gonna use this?</i> (E, M, H, I)</p> <p>In order to capture the attention and interest of our students in making them want to learn math/science, we need to show them how math/science is intimately connected to their everyday lives. This workshop will help you to utilize everyday objects to introduce and illustrate mathematical/scientific concepts and principles to your students in fun and exciting ways.</p>	