National Association of Geoscience Teachers

Pacific Northwest Section OEST Award Nominees

When nominating a secondary education teacher for the Outstanding Earth Science Teaching Award (OEST), we look at inventiveness, initiative, cooperativeness, community activities, teaching ability and strengths. Each candidate is known for their strong grounding in subject matter, their commitment, enthusiasm and love for teaching and their students. They are popular with students and spend time outside of the classroom with them in various activities building relationships. They combine humor with clear communication of ideas. Here are highlights of each of our 2007 section candidates:

1. **Dennis Anderson, WA**. Teaches chemistry, biology, geology, physics, and computer technology. He runs the school website and his students have made an excellent Webpage: Geology of Trout Lake, http://www.troutlake.k12.wa.us/Staff Pages/Anderson/Geo Web Page/GEOLOGYPAGE.HTM. He is a motivational teacher who plans and leads school-wide field trips to study the geology of Central Oregon, Mt. Adams, Crater Lake, Hawaii, and many more places. He teaches and demonstrates on-site geologic mapping at Mann Butte.

2. **Eric Groshoff, WA**. Teaches 5 science classes and visits and works with science teachers within the district to align curriculum. He trained for and started two college credit geology classes at the high school. He plays with the school pep band, volunteers with wrestling and homework center, and implements new policy and practices. His philosophy demonstrates **relationships** with students, **relevance** of instruction, and **rigor** of lessons. He actively involves the community with the school by leading a National NASA Robotic competition.

3. **Benjamin McLuckie, AK**. Teaches Natural Resources, Earth Science, sciences and math. An enthusiastic teacher who looks at science as a verb using field studies, labs, data analysis, 26"X48" PowerPoint poster presentations, texts, journals, and internet. Ben sees himself as a subject specialist, conductor, coach, tutor, parent, counselor, officer, and role model who creates environments where students value learning, become confident, solve problems, communicate, and think critically. He cautions teachers against covering too much too little. GIS is used as well as Google Earth and MyWorld GIS to discover plate tectonics. He uses Systems Dynamics, Stella, to help students learn to build, question and visualize by modeling, for example, cycles that underlie global climate change. With his $100/year budget he builds stadia rods from PVC pipe, and macroinvertebrate samplers from discarded onion bags. Students are involved in making this equipment as well as cheap dataloggers. Moodle science and math classes allow students to publish PowerPoints and give peer reviews. He participates with students in the EDGE program at the U of AK/SE. He acquired a grant to supply his classroom with a network and wireless laptops for each student. He helped with a grant for several rural communities to bring in Internet and was president of the ISP for 6 years. Classes work with the US Forest Service/Park Service and the city to investigate environmental issues. Summers are often spent collecting rocks and traveling AK's North Slope. Ben serves as a board member for the AK Natural Resource and Outdoor Educators while finding time to enjoy bluegrass fiddling, electronics, computer technology, travel, photography, hiking, bicycling, skiing and kayaking.

4. **Chris Loewen, BC**. From teaching in China to an inner city school with a high population of ESL students, he visualizes and works toward a single class that is an integration of Earth Science, Science, PE, and Community Recreation. He uses diverse methods to reach his students—and his students exceed district and provincial averages in their 12th grade Geology provincial exam. He

provides after school and evening study sessions. He has taught himself to use FrontPage and formed a must see website for all geology teachers and students at: http://www.mouatonline.com/Teachers/Cloewen/geology12/geo12index.htm. During class he combines his PowerPoints with the Internet for instruction. He recently attended a geophysics conference, takes his student to gem and mineral shows, and plans a showcase in the classroom. He supervises the weight room after school, coordinates and supports students with many needs, supervises dances, and coordinates events and professional development. He sponsors the golf and ski teams and is a welcoming, great listener who motivates struggling students.

5. **Clay Good, AK**. Teaches five full oceanography classes. He offers students a menu to pick from to acquire the grade they want: textbook readings, lectures, exams, labs, literature, conferences, and seminars. "A" students must complete a project with professional scientific mentors. Others often grade assignments of the student's choice. The students are responsible for recording their grades and submitting a quarterly portfolio that is then audited and graded. Each student each day must share a relevant science question. The question is discussed, not the answer. He incorporates the local setting into almost daily field trips and seminars. Numerous agencies such as NOAA and Coast Guard are utilized as resources for students. He humbly admits these are not new ideas but those of others. He also organizes teams (21) for academic competition at the National Ocean Sciences Bowl, operates a student salmon hatchery, and develops scientist-shadowing opportunities for students. He has served on numerous school and community committees such as president of the Juneau Education Association and served as science department chair. He was the 2000 Marine Educator of the Year and in 2005 four of his students presented regional issues at a Washington DC symposium. He performs in music ensembles and is politically active at the local and state level. His interactions with organizations provided the school with a $30,000 aquarium, trips out to sea for all his students, trips to the wastewater treatment facility of Juneau as well as cruise ships, and visits to the Coast Guard's Search and Rescue Command Center.

6. **Jason Schmid, WA**. Teaches Science, Advanced Science, and Environmental Science. He started the Marine Biology Explorers, which focuses on marine environment issues, specifically global climate change. He made connections with the local state park to integrate their education program into the classroom. He leads field trips to local areas to bring relevance to content. He works individually with 10 students requiring IEPs in one class alone and works closely with partner science and math teachers. He readily shares and aids new teachers and has developed a science poster and vocabulary document for district-wide use. He connects his instruction with the Chief Environmental Scientist at Naval Air Station and WSU Beach Watchers. He is also active with the National Junior Honor Society and a past vice-president of PTA. Currently he is a candidate for National Board Teacher Certification, mentoring a Preservice teacher, and applying for selection as a NASA Explorer school.

7. **Jeff Szarzi, AK**. An inspiring teacher in an alternative school who uses "hands on" such as salmon hatchery brooding in the classroom and the study of snow and moose. As a certified Core Curricula Instructor he teaches and certifies students as construction technicians. His high expectations motivate as students are taught to teach others. He masterminded Flexwood, which utilizes students crafting of furniture, greenhouses, and outhouses. These are then exhibited and sold by students. He spends hours writing grants and helping staff with technology. He is active in the AK State Science Consortium and the community. After school he is an active drummer in a performing band and a musher who runs the Tustamena 100. He is a trusted passionate role model and professional who has begun taking administrative classes such as education law.

8. **Lynda Oldow, WA**. Teaches Earth Science and Life Science. A passionate teaching expert with extremely high credibility, she comes from Australia with degrees in special education and science and the talent of an artist. She is a Science Olympiad adviser and has been science department chair for 12 years. She individualizes her teaching using labs, PowerPoints, kinetic

quizzes, self-discovery, Google Earth tours, and more. She arranges for students to come in before and after school, during lunch and prep times to stay current with missed work. She was a key trainer of staff in the use of differentiated instruction. She maintains relationships with Washington State University and the University of Idaho. She was lead teacher in aligning curriculums with standards and assisting all schools in the district. She has trained many student teachers into confident, eager young professionals. Despite all this, she is humble and always ready to pass on compliments to others.

9. **Mike Emory, ID**. Teaches Earth Science. He also finds time to be the president of the Idaho Earth Science Teachers Association and is involved with the upcoming Yellowstone workshop in July and an important vital website for Earth Science teachers: http://www.idahogeology.org/Services/EarthScienceEducation/Resources.htm. He has been designated the school district building technology leader for his school and has acquired a grant from the Excel Foundation for his integrated curriculum using GPS combined with water quality.

10. **Sheila Guard, WA**. Teaches integrated science including earth science. She coaches science teams, which participate in Science Olympiad and Decathlon competitions that have taken the teams to state and nationals. Instruction on scientific writing begins with Pre-assessment, and then the request of students to take a box of materials to explore and idea in which they can change a variable and explore an idea. Students then write up what they do and give this paper to other students to try and duplicate their findings. Students meet and determine if the reports need more information and the chance is given to improve the report. She then introduces a scoring guide and allows students to revise after which the reports are submitted. Reports throughout the year are kept in student portfolios so they can see their improvement. This improves testing answers involving inquiry. Another project is a boat trip planned by the student starting from the closest marina to the school and crossing the Puget Sound. Students design and name their boat. They determine the length of trip, the route, and ideal times based on tides and currents. They use navigational charts and since they must move through Ballard Locks this activity is combined with a physics lab on machine removal of water. They also compare salt and fresh water and look at online simulations. Students with disabilities may simplify this to find the straightest boat route while higher achieving students may extend their trip and visit other places. They may even plan a trip to Canada and research custom agreements. Students may focus on marine life or weather as part of their project. Students that do not understand concepts may represent ideas with diagrams and pictures. Lynda loves to share her ideas and is lead teacher on a grant project called "Systemic Change in Middle School Science" that uses science modules. She also has and willingly shares an online calendar for students that includes daily work, overhead notes, and project details. She passionately presents difficult concepts in a manner relevant to middle school students. She is a member of the National Science Teacher and WA Science Teacher's Association. She was the NW Region's Local Exhibits Coordinator for the 2004 NSTA Convention I Seattle and serves as the NW Science Olympiad Board chair in which she organizes nearly 50 local school teams. Her teams give presentations to community groups. Another project is "Shadow a Scientist" in which students observe, help and interview a scientist and then share this information with the class. This connects community and school. She is on the Teaching and Assessment Research Committee, is National Board certified, has earned a WA Initiative Scholarship, 6 years science department chair, chaired and served on a district-wide science articulation committee, chaired a building staff development, served on a national team that evaluated and reviewed SEPUP curricula, and earned Seattle Pacific U's Mathematics in Teaching scholarship.