My Earth science educator story – Pete Suchmann What I did, why I did it and what happened



Looking back on a very rewarding and a very successful Earth Science career - by Peter Suchmann - retired and busier than ever

When I think back over my 25 years as an Earth science teacher of 8th graders (13-14 year olds) in a wealthy, suburban school district on Long Island, New York State – several highlights stick out. I will describe just a few of them in this brief review.

Every year when we got to *Rocks and Minerals*, I always had NASA moon rocks as part of my motivational line up. The support materials were great and the opportunity to hold real moon rocks encased in lucite (Perspex[™] - to minimize contact with the actual moon rocks) was always a great surprise to my students. The moon rocks included some business cards that I photocopied and gave out to my students. They proclaimed that the bearer of the card was an official "LUNATIC" – having held pieces of the Moon in their own hands. The moon rock loan program still exists and if you pass muster with a training workshop and the required security clearance and if your school has the required safe for storage, then you too might be able to offer this wonderful opportunity to your Earth Science students. Here is the link: https://ares.jsc.nasa.gov/interaction/Imdp/

Throughout my teaching career, I participated in many different forms of professional development. I tended to shy away from the traditional classes that I found quite boring and instead I travelled to Disney World for classes at their now defunct teachers' academy (6 credits in marketing for teachers), I travelled with the Sierra Club on one of their amazing service trips to Chaco Canyon in New Mexico. It was on this service trip that I first became aware of the Sun Dagger the Stonehenge of the USA, see the links given at the end. Later, I also visited the Saguaro National Monument in Arizona.

I took a class in biodiversity in the San Juan Islands, near the Canadian border off the extreme north west of the USA mainland, that was organized by the Island Institute - where we studied the Orcas and whales of Puget Sound. By far the best experience was my trip with Earthwatch. I joined Professor Peter Busher's expedition in the Californian Sierra Nevada Mountains, where he was studying the California Spotted Owl - an endangered species. We slept in tents and took solar hot water showers when possible. We live-trapped local prey for our data base and learned how to call and photograph the indigenous owl population. We learned about the local economy and the local politics as we learned about sustainability and environmental research. I took tons of pictures and created a slide show that I used for many years with my students, as we discussed all the inter-related issues.

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Note that we successfully stopped the logging of a specific area of the National Forest because we had proof of the existence of the endangered owls living in the area...

I came back feeling recharged by my Earthwatch experience. I felt like a real Citizen Scientist and Activist and my students were enthralled by my experiences and anecdotes from my trip.

You can learn more about Earthwatch by visiting: http://Earthwatch.org/education/te acher-fellowships. You can also watch a Public Access TV show I produced last year on Earthwatch at: https://www.you tube.com/watch?v=yScVANUc_oU

Another fantastic extra-curricular experience I had was the production of a music video entitled the "Green Glove Video". One year, motivated by the Pink Glove Video for Breast Cancer Awareness, my E.S. students and I decided to embark on an Earth Day project which turned out to be a very memorable event for everyone involved. We decided to choose a local issue of littering and recycling and a global issue involving the Yasuni Rainforest in Ecuador. My son helped me to find a local rap band and the project came together nicely. When you visit the url – you will see the music video that resulted - so much fun – and the amazing opportunity that arose during the project. As we were looking for a global issue to include in the project, a friend of mine informed me that two Waorani Tribal Leaders from the rainforest were coming to the United Nations (UN) in Manhattan for an Indigenous Indian World Conference. Before I knew it ... he had arranged for the two tribal leaders to visit us at school where they informed us (with the help of translators from our foreign language department) about their plight and their struggles with protecting their rainforest deemed the most biodiverse on the planet - from oil companies looking to remove oil from underneath their villages. A true "Avatar" scenario - if ever there was one.

Note: One can only hope that James Cameron, the maker of the 'Avatar' film, (who was at the UN Conference on Indigenous Indians) will pay homage to these brave Indians - who only 60 years earlier were uncontacted by the outside world. My understanding is that he is not only making three or four more Avatar movies, but he is also involved in building *Avatar Land* at Disney (http://wfla.com/ 2017/01/01/go-behind-the-scenes-of-waltdisney-worlds-pandora-the-world-ofavatar/) – which will open later this year.

Here is the url: http://greenglovevideo. weebly.com/, for the Green Glove Video and a picture of the visiting tribal leadersarranged by my friend Carl Ross - who works with Save America's Forests in Washington DC, http://www. saveamericasforests.org/.

I remember clearly that the 300 kids who stayed after school that day had a very unique experience and the tribal leaders remarked that they felt our students, through the Q & A – had a better understanding and interest than the UN members that they had addressed earlier that day. The amazing opportunity for these suburban kids to meet native Indians from deep in the Amazon, who lead such different lives, was truly an eyeopening experience.

These opportunities reflect just some of the highlights of my teaching career. I do hope you all are able to create your own "Magic Moments" like some of these for your own students.

Pete Suchmann, aged 61, Long Island, New York, USA, January 2017, psuchmann@nshahs.org

Internet links for the Sun dagger

- https://www.exploratorium.edu/chaco/HTM L/fajada.html;
- https://www.amazon.com/Sun-Dagger-Americas-Stonehenge-VHS/dp/6302863589;
- http://www.bullfrogfilms.com/guides/sdguid e.pdf
- http://www.solsticeproject.org/science.htm

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