

My Earth science educator story – Bill Hoyt What I did, why I did it and what happened



On occasion of the M. Lucile Harrison Award at the University of Northern Colorado, 2011. (Photo credit: Barry LaPoint, UNC Media Services).

A different plan

When I arrived at college in the autumn of 1970, I was shocked to discover that my first course for my Journalism major was unavailable. My world had ended! Carefully laid plans shipwrecked! Nevertheless, finding a replacement course had to be done. Reasoning that promised fieldwork in “Geochemistry of Earth Materials” would resonate with my Lake Michigan upbringing and Canadian Shield canoeing, I went for that course. What a Godsend that course was—engaging, interesting, and full of field and lab work. Though I was hooked on geosciences, I stubbornly clung to Journalism for a year and a half before I finally changed my major to Environmental Studies (Geology). A different plan turned out to be a better plan....

When it came time to choose a thesis topic as required for my undergraduate degree, I was naturally drawn back to the water: the Lake Champlain Studies program directed by Dave Folger. That work entailed tracking clay minerals in the effluent from two paper mills on the New York side of the lake, principally kaolinite

and anatase (two minerals that make paper smooth and white). Because the scientific work on Lake Champlain involved data used in a U. S. Supreme Court case, I recognized at an early age that the societal relevance of geoscience research was more than just an ideal. I was hooked on the importance of research as well as the necessity to clearly explain to non-scientists why scientific results mattered. Working for the Vermont Attorney General’s Office in 1973-74 persuaded me that Earth education was my life’s work.

Blue water marine geology

Attending graduate school was not clearly on my mind until 1974, when I visited Jeff Fox at the State University of New York at Albany to consider a master’s research project on deep-sea turbidites in the Atlantic. Long-distance correlation of those fine-grained deposits had some relevance to the oil and gas industry when I finished in 1976, but with the explosion of hydrocarbon development and production technologies of the last 40 years, I still get requests for my thesis today. Societal relevance of research sometimes takes a while to develop.

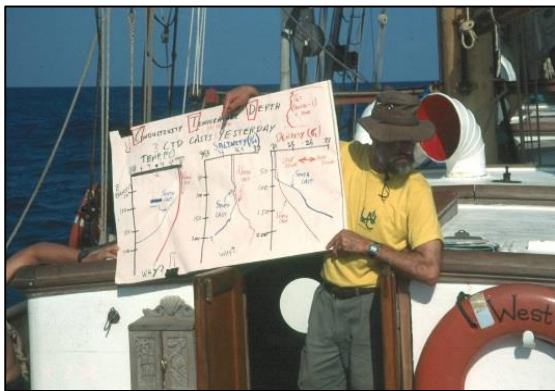
Coastal studies to Earth Systems Education

Coastal erosion and rapid shoreline changes drew me to study with J. C. Kraft on the Delaware coast of the Atlantic for the PhD. My colleagues in the geology and Sea Grant programs took both science and Earth education seriously, largely through the mentoring of Chris Kraft. I can still name the people supporting me in the project (Jim Demarest is still better than a ladder)!



Coring in the Lewes, Delaware marsh for J. C. Kraft's Recent Sedimentary Environments course, circa 1978. (Photo credit: Evelyn Maurmeyer).

Taking a job in 1981 as assistant professor at the University of Northern Colorado (UNC) in Greeley, I confirmed my penchant to work with students to develop their educational and career goals; brief consideration of jobs in the seismic stratigraphy branch of Texaco and the Deep Sea Drilling Project at Scripps proved that industry and research foci were not for me. I have loved teaching oceanography and geosciences ever since.



As Chief Scientist aboard SSV Westward Cruise 156, 1998. (Photo credit: Eric Zettler, Sea Education Association; Dean, Audrey Meyer).

My colleague at Northern Colorado, Lee Shropshire, introduced me to his college roommate, Vic Mayer of the Ohio State University. Vic was looking for a Western Center Director to develop the Program for Leadership in Earth Systems Education, which was funded 1990-1994 with National Science Foundation support. That project and its various Earth Systems Educators helped develop an attitude and a curriculum that celebrates the connections among various disciplines (science, history, economics, art, technology, environmental/ sustainability studies, and others). After returning from sabbatical studying the Great Barrier Reef at Sydney University in 1990, I devoted my professional career to Earth Systems Education (Mayer et. al., 1995). That led to international involvement with educators from Korea and Japan, and to being a conference organizer for the 2nd International Conference on Geoscience Education in Hawaii (Fortner and Mayer, 1998).

Go for the future

One of the best ways for a young Earth educator to get valuable professional experience is to get an internship/ apprenticeship (Hoyt and Urban, 2015). And if you are thinking about the future of sustainable energy production for a career path, you might read up on the topic (e.g. Dallegge and Hoyt, in press). All such journeys begin by placing one foot in front of the other and moving forward. Best wishes!

Acknowledgements

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