

Presentation 3 (oral; C. Kolodji presenting):

COSEE Superior Creates Passion for Science

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Abstract: COSEE was a transformative educational experience that has changed the way I teach. In July, I participated in the COSEE Lake Superior Shipboard and Shoreline Science program. I spent a week on the US EPA's R/V Lake Guardian with 14 other teachers and a crew of sailors and scientists. Onboard, we took water, zooplankton and sediment samples; collected data for an ongoing study of the Lake's benthos; participated in courses; and designed team-based research projects and presented our findings to the group. Teachers from varied disciplines were able to network on curriculum. COSEE was experiential learning. We put our hands on the tools of science. We stood on the deck at night with the crew and collected specimens. We stared through microscopes and picked critters out of the muck. We also received specific training in aquatic sampling, laboratory skills, microscopy and oceanography. "Doing" science rather than simply "learning" science made COSEE transformative. This has changed my classroom teaching. I use new laboratory techniques and lessons that I never considered before. Currently, we are working on water quality studies at a nearby lake. The metals class has been recruited to make a mini PONAR dredge. However, there are challenges to integrating ocean sciences into my classes. I teach four distinct subjects, and I must attend to our state curriculum. Nevertheless, biology students at Chisholm High School have benefited from COSEE. I have new skills and knowledge as well as new connections to other teachers and scientists. More importantly, I am more passionate about the science I teach. This abstract does not necessarily reflect USEPA policy