

Subcommittee on Education, Joint Committee on Ways and Means
Senator Lew Fredrick, Co-Chair
Representative Susan McLain, Co-Chair
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Salem, Oregon 97301

My name is Dan Hansen and I'm a mathematics teacher at Warrenton High School. In September of 2018 I was granted a wonderful opportunity to sail with the R/V Oceanus for a teacher outreach program. As I was in the early stages of developing an Applied Algebra program in support of our school's STEM program, my experience aboard the Oceanus was instrumental. This opportunity would not have happened had it not been for the funding from the Oceangoing Research Vessel Program

What I didn't know when boarding the vessel was the extent of which I was completely unaware of the oceanographic and biological challenges facing our waters. Every day I stand in front of my students and preach about how mathematics is an indispensable component to understanding the world, be it dry or wet, but never having been involved in the operations of the applications for which I'm teaching. The R/V Oceanus changed everything in my classroom.

More than just being aware of rising water temperatures, krill migration patterns and densities and changes in ocean acidity I felt childishly naïve about the need for human acuity to these issues. Working side-by-side with scientists, I was able to field inexhaustible quantities of questions. In turn, this allowed me to succinctly and rigorously understand what it was that I need to bring back to the classroom; experience and perspective.

In the months that followed my voyage, I began investigating my labs, projects and application units to determine how I could integrate wave energy, vessel operations, and data analysis from sub-surface instrumentation reading to teach sinusoidal function behavior, trigonometric navigation techniques and have a real-world application for extrapolating exponential models which is, above all else, finally relevant.

Being infatuated with the North Coast of Oregon I am developing applicable math curriculum to students whose entire family lives and thrives with the tides. I owe my clarity of purpose in my classroom to the R/V Oceanus. For had it not been for the staff and crew, my message of real-world application in the math classroom would have been assumption, not experience.

Thank you for your time and consideration on continuing to fund this indispensable program. Supporting the Oceangoing Research Vessel Program is to support teachers in the classroom. For if we don't continue to educate the educators they will have nothing to educate with.