

Abstract Submitted
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On the Sea, From the Sea, Of the Sea: The Physics of maritime Governance ROYCE JAMES, ERIC PAGE, U.S. Coast Guard Academy — The United States Coast Guard Academy Physics Section is proud to present our initial conceptions of “*On the Sea, From the Sea, Of the Sea: The Physics of Maritime Governance*,” a program funded by an APS Outreach Grant in 2013. In our classes, the Physics Section has focused on active student engagement for the past ten years. Recently, we have refined our program to make heavy use of Interactive Lecture Demonstrations (ILDs) and our own highly interactive adaptation which we call Interactive Lecture Labs (ILLs). “On the Sea” is a unique opportunity to investigate their use in a different learning modality from our standard college level military academic use. Multigenerational science, technology, engineering, and mathematics (STEM) projects are a prolific source of academic discourse, while learning through play has been touted as an effective learning tool. We plan to investigate group and individual participation, intragroup communication, demographics, and prior skill (or education) in comparison to outcomes in learning objectives through projects designed to educate the Coast Guard Academy and surrounding community on the physics of the Coast Guard’s missions. Progress on the lab and demonstration designs, community participation, and our emerging ILL and ILD pedagogical methods, will be reported.

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