

Dupont Summit 2016

Science, Technology, and Environmental Policy

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Panel

"Amping-Up Pedagogy through Interdisciplinary Instruction: A Study of the Effects of Interdisciplinary Instruction on Undergraduate Attitudes and Values Related to Energy Issues at the U.S. Naval Academy"

This study makes use of a pre-test/post-test design (with a control group) to test the effect of an interdisciplinary energy course on student attitudes and values related to energy issues. The interdisciplinary energy course was co-taught by engineering, political science, economics, and oceanography professors at the United States Naval Academy during the fall of 2015. The study finds that students in the energy course experienced significant changes in their energy attitudes on half the categories tested, while students in the control group did not experience similar changes. The changes were greatest among female students, politically moderate students, and engineering students. The findings suggest that interdisciplinary can have a powerful impact on student values, but that the impact works through existing demographic and ideological factors.

Moderator & Panelist Howard Ernst, United States Naval Academy

Panelists

Karen Flack, *United States Naval Academy* Joseph Smith, *United States Naval Academy* Kurtis Swope, *United States Naval Academy*