UC SANTA BARBARA



January 15, 2020 Tom Jacobs

A Teaching Tool for a Warming World

If the next generation is going to tackle — or successfully adapt to — the massive problems posed by a warming world, it will need to be both educated and inspired.

Those are the twin goals of the new Knowledge Action Network and digital platform UC-CSU NXTerra. Designed by teachers in the University of California and California State University systems, but available to instructors, students and concerned citizens anywhere in the world, NXTerra is a clearing house of accurate, up-to-date information for learning about the climate crisis.

With topics including climate change and religion, climate change emotions, consumerism and climate change, and even climate-change fiction ("cli-fi"), it provides ways of incorporating knowledge about this all-important topic into many fields of study. In addition, it offers concrete ways to turn concern into advocacy and action.

"We want to mobilize professors, so they can mobilize the next generation," said Richard Widick, a visiting scholar at UC Santa Barbara's Orfalea Center for Global and International Studies. "We want to help build an informed and motivated global citizenry for the dawning era of climate emergency."

"Our goal is to empower educators and create material that will be useful to high school teachers as well as university professors — and to students as well," added John Foran, a professor of sociology and environmental studies at UC Santa Barbara. "We want it to be a place where any member of the interested public can find at least something they can use."

Foran, Widick and Sarah Jacquette Ray, an associate professor of environmental studies at Humbolt State University, are the three co-coordinators of the platform. Working with them are six UC faculty members, and six from the CSU system, making this a rare close collaboration between two of the state's largest publiceducation systems.

The platform is an outgrowth of UC President Janet Napolitano's 2013 Carbon Neutrality Initiative (CNI), which envisions turning the entire UC system into a carbon-neutral entity by the year 2025. That effort "has been largely a project of scientists and engineers, who have been looking for technical solutions," Foran said. "We all felt the social sciences and humanities had a role to play."

To that end, he worked with the CNI's Faculty Engagement and Education subcommittee, which subsequently invited members of the Cal State faculty to join the effort. "We wanted to engage the CSU system, with its vast human resources, as our natural partners," he said.

"Out of four regional workshops up and down the state at different CSUs came the idea that we should create a website of resources. We realized there were many resources out there we don't all know about — partly because there isn't enough interaction between the two systems."

After nearly a year of preparation, the website went live in November, with a wide range of material on climate science, sustainability and "climate justice" — the concept based on the reality that climate change-induced problems disproportionately impact those with less political power, especially the poor.

"We are pushing the political envelope," Foran admitted, "but that's because people understand the depth of the crisis. Even climate scientists are now saying we're talking about a deep, systematic transformation if we're going to get through this."

Besides the latest official reports on the climate crisis, the site includes guides for both students and teachers, bibliographies, course outlines and a variety of ways to become more eco-literate.

"This is not scholarship produced for other scholars," Foran emphasized. "We're presenting what we feel are the best materials out there for teachers to use in the classroom. They have to be engaging and accessible.

"There are also videos, films, and examples of experiential learning. That can mean engaging students in a Socratic dialogue, or getting them out of the classroom to try some of these ideas."

"The site is dynamic," Widick added. "It will constantly be changing. We need to stay out in front of events."

Start-up funding for the project was provided entirely by the University of California. With the platform now launched, the directors will focus on finding additional sources of financial support. "We hope to have a five-year plan in place by the end of the year," Widick said.

No doubt some hard-core scientists will be puzzled by the inclusion of material from the social sciences and humanities. But as both Widick and Foran noted, it's easy for young people facing a frightening future to feel overwhelmed or depressed emotions that can easily morph into resignation and apathy.

One way to avoid that is by engaging with humanists and social scientists to find productive ways to channel those emotions — and with the imaginative power of artists, who can envision a hopeful future.

"We need more than just narratives of gloom and extinction," Foran said. "We need to create realistic future scenarios in which we live better lives than we live now."

NXTerra is a constituent project of the Orfalea Center's Environmental & Climate Justice Studies research hub (EJ/CJ), and is part of EJ/CJ's broader effort to build a community of environmental justice studies at UC Santa Barbara and across California.

More information about NXTerra can be found at <u>www.nxterra.orfaleacenter.ucsb.edu</u>.

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.