

Universities have three main missions research, teaching, and public service — and all three are implicated by the climate crisis. Universities have begun to realign their institutional structures in response to these challenges. Of course, faculty and students across many campuses are already deeply engaged with climate issues. But this kind of bottom-up response needs institutional support. It's all very well for universities to "let a hundred flowers bloom" but someone needs to be in charge of watering the flowers.

The institutional developments are new, but university engagement with the climate issue goes back decades. University research has led in developing clean technologies, mapping the impacts of climate change, and identifying policy tools to reduce emissions. Our students will live through a dramatic transformation of our energy systems and global changes that will require massive adaptation efforts. Many are eager to learn more about these issues, and courses have sprouted up across campus in response— over fifty undergraduate courses at Berkeley, for instance. Because climate change issues are so profoundly multi-disciplinary, they do not fit well within traditional university silos.

At the institutional level, Stanford has made the most dramatic move — supported, as you might expect, by big bucks from Silicon Valley. With well over a billion dollars in funding, the Doerr School incorporates and plans to expand departments of earth system science, oceans, geophysics, environmental engineering, and energy science and engineering, and parts of the social sciences. Other schools have also created sustainability schools. Columbia has a Climate School. ASU has been a leader in this area with its School of Sustainability.

A related approach is creation of an institute rather than a school. Columbia's Earth Institute dates back to 1995. UCLA has an Institute of Environment and Sustainability, while Minnesota has more recently created its Institute on the Environment.

Harvard has adopted a different approach by creating a new administrative position, the Vice Provost for Climate and Sustainability. The Vice Provost also runs the Salata Institute for Climate and Sustainability, which was launched with the help of a \$200 million gift.

Creation of a Vice Provost position makes a lot of sense, and many other schools have made this part of their climate responses. Here are a few examples:

- Yale has a Vice Provost for Planetary Solutions.
- Michigan has a Sustainability and Climate Action Vice Provost
- Duke has a Vice Provost for Climate and Sustainability
- Brown has an Assistant Provost for Sustainability

It makes sense to me to have someone in campus administration who's thinking about climate change teaching and research 24/7. and I hope that more schools — including my own — will follow suit.

Institutional changes don't accomplish anything by themselves. They are worthwhile only if they bring more resources, energy, and focus to universities' climate research, teaching, and public service. But they do have the potential to boost the important work that universities are already doing to address the global climate crisis.