My large public university is a model of unsustainability. Cars are privileged over pedestrians, and every afternoon hundreds of drive-alone cars clog campus streets. Acres and acres are given over to parking decks and asphalt lots. No campus work is accomplished without idling trucks and noisy internal combustion machines: leaf blowers, edgers, mowers, etc. The newer high-tech campus can be reached by a short walk, but, because this means hazardously crossing a busy multi-lane road, no one does. The bus line is contracted out to an operator who runs high-polluting, noisy diesel buses. One rarely encounters faculty walking across campus; administrators never. Presumably they are hunkered down in their offices, or else they drive from place to place.

Sustainability, like other values campus administration pretends to care about (cf. diversity and inclusion), is relegated to its own unit with little wider influence. Campus administration points to successes in sustainability when they save money - for example, power bills reduced through a long-term commitment to natural gas fired cogeneration - or to a few high-profile or feel-good projects, such as new LEED certified buildings (while older buildings literally crumble) and paper-towel composting in the student center.

Consistent with its unsustainability, my campus is not resilient. Basic infrastructure (power and water) often fail, and even a minor storm causes wide-spread disruption and cancelations.

Academics: we had a growing, truly campus-wide environmental science (ES) program. Its founder and director was pushed out when the program was moved administratively, then instructionally, and without resources, into a single department, where it has become a barely differentiated flavor of other departmental majors. Campus administration is relentless in pursuing improved US News & World Report rankings and in preparing students for lucrative jobs in tech, biomedicine, and business. A thriving ES program would presumably be a distraction from such emphases, if not an outright embarrassment.

This is, I concede, a dark view. It can be tempered by acknowledging the many campus staff who are strongly committed to sustainability - our dining service service is exceptional in this regard - along with the many students and faculty who want to do better. A recent grass-roots effort across students, faculty, and staff shed needed light on widespread student hunger and homelessness, yet, here again, efforts to address this have been made without real engagement from the administration.

What does any of this, which I suspect is not atypical of other big universities, have to do with *Earth Education for Sustainable Societies*? Many years ago, my friend and mentor, Bruce Hannon, pointed out (Hannon 1995) that as students learn from purposeful instruction in courses, they also learn, however inadvertently, from the campus on which they live and study. What students expect for the wider world, and, specifically, what they think possible in addressing the climate and global change emergencies that will dominate their lives, will be strongly colored by what they have experienced in college..

If this means our workshop succeeds only if we go home and transform our institutions into models of sustainability, most of us are doomed to fail. More hopefully, however, and (finally!) to the point of what we can do in Northfield: we can develop opportunities for our students to learn about the Earth and sustainability by critically analyzing what is happening around them on campus and in the surrounding communities. While this may sound like the old "campus as classroom" idea, most often that concept is associated with work on established, presumably

successful projects.<sup>1</sup> What is needed, instead, is for students to develop the capacity to recognize what is unsustainable and why, to propose achievable solutions, and to advocate effectively for such solutions to be implemented. This is not to say we must train all of our students to become activists, but I assert that, given the magnitude and urgency of environmental crises, if many of our students do *not* go on to bring about real and profound change towards sustainability, there is little hope for them or the planet to thrive.

Student opportunities to address campus and community sustainability must be authentic, they should be scaffolded (i.e. not only a capstone), and they should guide students toward becoming:

- system thinkers: recognizing nuance, since rarely do outcomes in a complex system have a single cause; becoming adept at drawing important connections between apparently disparate concepts (e.g. racism and climate change).
- numerate: appreciating that numbers (How much CO<sub>2</sub> abated? What will it cost?) always matter; a crucial skill is being able to recognize and expose bad numbers ("It's only a little lead.") promulgated for nefarious purposes.
- confident in their efficacy and agency: building skills, learning about sustainability successes, and, most importantly, experiencing their own successes in effecting change.

Finally, I hope we will bring urgency to this project. While I am happy when my atmospheric dynamics students become more adept at solving wave problems, it is not a matter of life or death. Helping our students become makers of sustainability is, however, very much a matter of life or death, for them and for the Earth.

## Reference

Hannon, B., 1995: *In Loco Naturae*, *Change*, **27**, 58-63. (I cannot post this article but am happy to email copies upon request.)

<sup>&</sup>lt;sup>1</sup> Googling "campus as classroom" my first hit was Warren Wilson College. Wilson is a wonderful college, but not an especially useful model for my 35,000 student campus.