David Orr once wrote that “all education is environmental education”, and I believe it is possible to truly weave it into national curriculum in the US. One way to promote environmental education on a national level (somewhat counterintuitively), is to focus on place-based education. Place-based education helps teachers and students hit all the most necessary points: it is generally long-term and project-based; aligns with local and national science standards; and involves community members and organizations, thereby inherently diversifying environmental and earth education.

By creating a national framework to allow teachers, grades, and whole schools to explore place-based education projects, communities can focus on what makes the most sense for them rather than following an outline from somewhere else, which may not be relevant for the community at hand. For instance, rainforests are incredibly important ecosystems in many parts of the world, and of course should be studied as the necessary biome they are. In my 15 years of public education in New York City, however, plus 4 years of undergraduate study, I learned a lot about rainforests, but I don’t recall ever learning the word estuary, which is the ecosystem that New York City is built on. There are now dozens of community science projects happening on the Hudson River estuary, many of which include public and private school students, as well as efforts to embed this estuarine education into the curricula and lesson plans of classes and schools throughout the city, and woven through the science standards.

By working with community organizations (often non-profits), teachers, and local up to national departments of education, place-based and project-based education can be ingrained into curricula throughout grade levels, with schools effectively working on the same topic at varying intensities. It can also seamlessly be woven throughout disciplines – for instance, English classes can focus on readings and writing public service announcements about the issue; history classes can research the background of the problem and come up with solutions; science classes can conduct field research and look for historical data; and math classes can analyze the data through charts and graphs. Furthermore, these projects inherently attract a wide audience, since they are embedded in the community the students live in and partner with organizations that are already doing work on the issue. That could also help attract more interest from the students themselves: if they care about an issue in their own community and see the myriad ways they can help tackle the issue, they might be more likely to be excited about the schoolwork and even follow their passion after their formal schooling ends.

This is obviously a huge project, but it’s not impossible. It would need support on many levels – community organizations, teachers and principals, curriculum writers, professional development, departments of education, the federal government, and, of course, funding. I have seen this type of project in action in New York City through an NSF-funded project surround oysters and New York Harbor, and while it hasn’t yet hit every single teacher and school in the region, real progress is being made, while the number of students, schools, and oysters involved keeps rising. Hopefully this workshop will provide opportunities to create connections between educators and enthusiasts throughout each of these disciplines to create national and lasting change to promote earth and environmental education.