Beyond "Zoom Sucks": Environmental Studies and Sciences, Fieldwork, and the COVID-19 Pandemic

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videos. I am increasingly shifting my tone away from the doom-and-gloom messaging common in conservation and instead focusing on bringing enthusiasm, a sense of wonder, and positivity to my teaching.

Just as adversity and new selection pressures can drive evolutionary innovations, I'm hoping that teaching through the pandemic will ultimately lead me to become a better teacher. These lessons were likely waiting for me already, but I have them in my pocket now. As I move forward, I will keep the need for connection, support, and positivity at the front of my mind.

Beyond "Zoom Sucks": Environmental Studies and Sciences, Fieldwork, and the COVID-19 Pandemic

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In the discipline of environmental studies and sciences, fieldwork is central. For many educators and researchers, there is a belief that, at the core, one can't deeply understand a place without spending time in and collecting data in the field. So when the COVID-19 pandemic hit, there was rightful widespread lamentation of the inability to conduct fieldwork. Academics argued that undergraduates wouldn't learn data collection techniques or connect with fellow students. Graduate students' academic work was stalled, with vaccine access privileging some and not others. Researchers' long-term projects were interrupted. Further, there was a fear that if faculty taught too effectively remotely, funding for field work would be pulled. While faculty did their best to adapt, there was communal grumbling just below the surface. On social media, a prominent conservation biologist simply stated, "zoom sucks".¹

There is a robust literature on how to make distance teaching and learning achieve academic objectives and facilitate student success. At its best, distance teaching and learning is a tool for overcoming inequity and access. For many working parents, caregivers, and the differently-abled, days or weeks in the field is a non-starter. Further, there are real risks to particular groups, such as those who identify as women, when in remote locations. Distance teaching and learning can reduce the "friction of distance"ⁱⁱ between students and the education they want. Having caregiving responsibilities or being differently-abled should not be barriers to achieving success and furthering progress in environmental fields of study.

Further, we need to challenge the idea that distance teaching and learning inherently inhibits connection, either to a place or one another. During the pandemic some faculty reported feeling more connected with their students and colleagues because of the ease of online interaction, even half-jokingly reporting that they had time to hike (and hence "connect with nature") during what were previously commuting hours (Quay et al. 2020).

ⁱGiven that this individual's social media platform is private, we have not cited their quote directly. ⁱⁱThe origin of this term is unknown, but it is a core principle in the field of economic geography: "As the distance from a point increases, the interactions with that point decrease, usually because the time and costs involved increase with distance." (Oxford Dictionary of Geography, 2009).



The pandemic necessitated creativity with respect to field data collection. Instead of a single researcher traveling to a number of field sites, individuals already in those locations collected data per the principles of citizen or community science. Some outdoor educators used the pandemic as an opportunity to advocate for the safety and resiliency of fieldwork as a pedagogical tool.

There will always be questions that only fieldwork can answer. But distance teaching and learning and field-based learning have been unnecessarily dichotomized. Scientific research is nothing if not a collaborative effort, and not all work is done in the field. If one isn't able to conduct fieldwork, for whatever reason, there are multiple ways to engage with the scientific process. The broader scientific community can heal this artificial dichotomy by committing to make room at the table for everyone.

Further, it's not that virtual learning platforms are inherently bad. What was bad was the massive disruption the pandemic caused in our lives, academic and otherwise. Individuals respond to teaching and learning mediums differently and being suddenly forced into one or another is uncomfortable. But it doesn't mean that one is inherently superior. We need to acknowledge the difference between hating distance teaching and learning and hating the pandemic. We can use virtual learning as an ongoing tool to facilitate equity and access, rather than treating it as a proxy for the pandemic.

The calls for returning to the field, as well as the classroom, should be tempered with the recognition that distance teaching and learning will always be a part of higher education, and that the ability to participate in fieldwork is not a privilege held by all. For many, the pandemic continues to pose real risks and barriers to participation. Rather than lament the lack of fieldwork during the pandemic, we should think about it more creatively. Uncertainty and dynamism will be an inherent part of educational leadership. Distance teaching and learning will remain a tool in our educational toolbox, and perhaps more importantly, help remove barriers to participation in environmental studies and sciences. We need everyone if we are to address the environmental problems of the present and future.

REFERENCES

Quay, J., et al. 2020. What future/s for outdoor and environmental education in a world that has contended with COVID-19? Journal of Outdoor and Environmental Education 23:93–117.