

## Episode 87: Lauren Cagle

### *Transcript*

Welcome to Pedagogue, a podcast about teachers talking writing. I'm your host, Shane Wood.

In this episode, I talk with Lauren Cagle about environmental rhetoric and climate change, technical communication, science communication, and disability studies.

Lauren Cagle is an Assistant Professor of Writing, Rhetoric, and Digital Studies (WRD) and Associate Faculty in Environmental and Sustainability Studies (ENS) at the University of Kentucky. Her research and teaching focus on overlaps among digital rhetorics and scientific and technical communication. Cagle frequently works with local and regional environmental and technical practitioners; her collaborative partners include the Kentucky Division for Air Quality, the Kentucky Geological Survey, the University of Kentucky Recycling Program, and The Arboretum, State Botanical Garden of Kentucky. Cagle's work has appeared in *Technical Communication Quarterly*, *the Journal of Technical Writing and Communication*, *Rhetoric Review*, and *Computers & Composition*.

Cagle, thanks so much for joining us.

*SW: You teach classes on environmental rhetoric and climate change communication and policy, which I feel like is extremely relevant given global conversations and current conditions. Can you talk more about your approach to teaching and how you center environmental rhetoric and conversations on climate change in the writing classroom?*

LC: I would love to talk about that. In terms of the relevance, I remember joking with other environmental rhetoricians in fall 2016 and early 2017, one of those, not really a “ha-ha” joke, more like a... joke of, “Oh, we never wanted our work to be this relevant,” particularly those of us who had been working on climate denial over the previous years. And it went from being a I read the comments on internet forums to I pay attention to what the director of the EPA says.

In terms of the classroom and environmental rhetoric, I'm in a writing and rhetoric department, so we're the Department of Writing, Rhetoric, and Digital Studies at the University of Kentucky. I'm really fortunate in that we actually have majors and minors who are really interested in rhetorics of all different kinds. I get to teach really dedicated environmental rhetoric courses occasionally. But as is true for so many rhetoricians, and especially those of us who also are in tech comm, which is my original home, technical communication, I also teach a lot of courses that get designated as service courses, although I have some issue use with that language.

I teach technical writing for engineers, animal sciences majors, neurosciences. I frequently teach a course called Writing in the Social Sciences, which is for political science majors primarily, but we also get historians and anthropologists. And then a Writing in the Natural Sciences course, which is maybe my favorite right now, because it dovetails so well with a lot of collaborative research that I do with scientists these days. And that's mostly for chemists, biology majors, and earth and environmental science majors.

In those courses I don't necessarily have as a topical focus, like environmental rhetoric or climate communication and policy. But what I've found is that I can use that area of expertise as a kind of center point for the course when I'm selecting sample readings, for example. If we're working on an assignment where students are learning how to read scholarly literature, I'll select published peer reviewed papers that are about climate change or environmental issues in some way, not necessarily environmental rhetoric, depending on the majors that I'm teaching. It might be a published study about climate policy for the poli-sci students. It might be a published study about various kinds of environmental engineering on college campuses for the engineers and so on.

What I've found is that students can all sink their teeth into that. Even if students don't self-identify as environmentalists, or this isn't a major part of their identity or focus out in the world, it's still something that they're aware of and is an unfortunately universal topic right now, these questions. And then it's very exciting when I do get to teach the more focused topical classes and get to have these conversations with students about what do we even mean when we say the word "environment"? One of my favorite assignments I've ever done was in an environmental rhetoric class. The class itself was called Rhetoric of the Environment and Climate Change. It was a special topics class, so I had to come up with a descriptive title.

We did this course collaborative project. I had 10 students, and we made a course Instagram, so we all shared a log-in, but everyone posted anonymously, so no one knew who had posted which picture. Throughout the semester, we had guiding questions. For the first third of the semester, it was like, what is the environment? And then students would take pictures to answer that question. It was inspired actually by photo voice, which is a research method that I've used in my research. I mean, this is really a key takeaway, I guess, from all of this, is that my research and my teaching really bleed into each other.

By the end of the semester, we had this Instagram feed where you had seen the evolution of students thinking about questions like what is the environment? Is there a difference between environment and nature? Where it had started with pictures of trees and then evolved into pictures of litter, because they were suddenly noticing the built environment. And then suddenly they're posting house plants, like nature brought into their own personal environments. So it was this really great experience.

And then we did a world cafe at the end of the semester, which is a participatory method that comes out of community organizing, actually, where you do these round robin approaches to brainstorming where students cluster in different groups and have these timed activities to answer questions. Then we all come together at the end and share. We came up with a shared definition of "environment" and "nature" based on that. So that was really fun, and also really, I think, insightful for both them and me.

The last thing I want to say on the teaching environmental rhetoric and climate policy is that because of my interest in the environment and climate, I've been able to develop a multiyear partnership with Roberta Burnes, who is the primary education person at the Kentucky State Division for Air Quality. She actually heard me speak. I was one of the featured speakers at the March for Science in 2017 here in Lexington, which for folks who don't know Kentucky,

Lexington is the second largest city and is a little blue pocket in a red state. But you know, the idea of a red state is really reductive. We have a lot of folks in Kentucky who care a lot about environmental issues, even folks who don't vote necessarily the way that you think they would.

We had a turnout of over a thousand people at this March for Science, and Roberta heard me speak about climate denial. She found me in the crowd after and was like, "Hey, I work for the Division for Air Quality. I would love to work with you on stuff." So we've been co-teaching courses. We've done three courses over the last umpteen years. And then that partnership has expanded into all these other realms. We've done a series of Lunch and Learn workshops for the Kentucky Association of Government Communicators. We presented at the North American Association for Environmental Educators together. And just this past spring, we actually led a series of workshops for state government on web accessibility, actually not web accessibility per se, more like digital accessibility, so making PDFs and PowerPoints and Word documents accessible.

That partnership, we have a book chapter coming out that we co-authored, which is really exciting, she was like, "I never thought I would write a book chapter," and I was like, "Put it on your resume," about our partnership, which we talk about in terms of participatory action teaching, inspired by the tradition of participatory action research, where we have this relationship that has really escaped the boundaries of what we traditionally think of as service learning. I guess that's a very long-winded answer to your question, but again, I think the through thread is that I don't really see a lot of distinctions between the teaching, the research, the personal interests. It's not that I'm looking for ways to combine them. It's just that those ways bubble up and impose themselves whether I want them to or not.

*SW: Cagle, how does environmental rhetoric intersect and/or inform what you do in technical communication? I also think that this question might lead to defining scientific communication, and your work through that, and what scientific communication means to and in different disciplines. That might set the stage for talking a little bit about your approach to teaching technical writing.*

LC: I was really glad for the opportunity to reflect on the intersection of the environmental rhetoric and tech comm just in the last week. For listeners who don't know, Shane sent me the questions ahead of time, so I had a chance to think about it. Thank you, Shane. I just wrote an abstract for the American Geophysical Union Conference, which is an academic conference for geologists. I've been working for the last, let's see, two years now, I guess, with the Director of the Kentucky Geological Survey, Bill Haneberg, who is an incredibly accomplished geologist. He's an expert on landslides and deep water drilling, among other things. He and I wrote a grant together two years ago that was funded by the National Academy of Sciences. Shout out to them. They have a Standing Committee on Science Communication.

Our project was to identify new stakeholders that KGS, the Geological Survey, hasn't traditionally reached out to, and then figure out how to engage with of them. That project got started because Bill came to me and said...we had already met through environmental stuff on campus, so this is a long-winded way of talking about how environment is not disciplinary. We had met through just environmental things on campus, and then he had invited me to give a talk

at a seminar that KGS hosts every year for their stakeholders. That had gone really well, so he came to me and said, “You know, I really want to start reaching non-traditional stakeholders. Do you want to get in on this?” I was like, “Yeah, absolutely.” I said, “Okay, so who are we trying to reach?” And he said, “I don't know.” I said, “Okay, let's start there.”

A lot of times science communication, which is not owned by rhetoric, like when people say “science communication,” they mean a lot of different things. When scientists say it, they usually mean other professional scientists who communicate with publics as a hobby. Well, not necessarily a “hobby.” There are folks who have taken it on as sort of like a full-time thing, like Katharine Hayhoe, for example, who is a Texas climatologist who is also an evangelical Christian and spent a lot of time doing engagement with those communities. But a lot of times it's like science communication is a scientist who has a Twitter feed or a scientist who has moved into public communication realm, like Neil deGrasse Tyson, for example.

When folks in communication studies or even the communication side of rhetoric say “science communication,” again, a lot of times what they're talking about is public communication. I'm thinking, for example, of the Yale Climate Change Communication Group, which does incredible work. They're the folks who do the large-scale surveys to identify attitudes nationwide around climate change, and they've been doing that longitudinally for a number of years. They also do experimental work. But over here in rhetoric of science and technical communication, which is sort of, I think of myself as living in this Venn diagram of environmental rhetoric, rhetoric of science, and tech comm, over here in rhetoric and tech comm, when we say “science communication,” we might mean a lot of things.

If you think about the roots of rhetoric of science, the folks who really sort of kicked that field off in the '70s, more in the '80s, were actually focused on scientists talking to scientists. There was a lot of studies of the great men of science and their communication processes, so work on Charles Darwin's journals, for example, and how he deployed rhetorical appeals in order to get around potential charges of blasphemy or whatnot. So when I say “science communication,” I might mean a lot of different things because of my rhetorical background, because of my tech comm background.

So when Bill was like, “Hey, let's find some stakeholders to talk to,” it wasn't just, “Okay, science communication. We're going to make some pamphlets. We're going to make a fancy website. We're going to make some YouTube videos and show them to people.” I was like, “No, we're going to go to the drawing board. We're going to do a really participatory user-centered human-centered process.” So what we did is we decided to focus on Eastern Kentucky. We wanted to stay in a region where people had shared geological experiences. And the whole thing is just tech comm, top to bottom. It's environmental rhetoric in the sense that the question was, who are these stakeholders that KGS is not currently reaching, because a lot of their publications are really technical or they just aren't aware of who else is out there and might want geological information.

In terms of the methods and the process and the mindset, that's all tech comm. It's like, we're thinking of these people as experts in their own life. We're thinking of them as users of communication, not passive recipients of one-way science communication. We're thinking of our

methodological approach as very pragmatic, like what's going to work to get us the information that we need? We're going to recruit folks through unusual channels, because we don't just want the same five people who participate in every study about Appalachia. We want to really dig down into the communities and find folks whose perspectives aren't usually included.

We used diary studies, we used photo voice, we did qualitative interviewing, and then we pulled a lot of methods from really hardcore user experience tech comm. We used desirability testing, which is a method that was actually developed at Microsoft to study people's affective responses to software. And we used task-based protocol testing, so saying, okay, here's a document that we've created, here is a task, you need to figure out who to call after a landslide happens on your land. I don't think this is true across the board, but for me personally, environmental rhetoric is the locus of my interests. The projects that I pick, the collaborators that I work with, the environment is the center point, the gravitational well.

And then tech comm tends to be the methods and the mindset. Again, a lot of my courses, I'm not teaching environmental rhetoric directly. I'm using the environment or climate change as a topic that I can teach certain skills or help students work through, like practicing how to read or how to cite or things like that. We don't necessarily have those conversations about what is the environment or what is environmental rhetoric? But what I do is in those courses, I do absolutely have conversations about what is rhetoric, period? And I teach all those courses as rhetorical theory courses, so we do genre theory and we do activity systems theory.

It's hard sometimes to pull these things apart when asked something like, how did these different interests intersect, because I've realized recently, I've been in academia now for 11 years, and I've realized that time is valuable, not because I've managed to accomplish so many things, but because the perspective that I could bring to my teaching or my research, this sedimented product of all of the things I've been exposed to over those years.

*SW: This next question asks you to intersect things again here, because I feel like your work is incredibly interdisciplinary, and you draw on different theories and frameworks in your teaching and your research. For example, you also focus on disability studies. In your article, "Teaching a Critical Accessibility Case Study," in 2016, you encourage technical communication teacher-scholars to reimagine the field and reconsider curriculum through disability studies and accessibility. You wrote that five years ago with Ella R. Browning. Have you seen technical communication as a field grow in its incorporation of disability studies theory and practice and frameworks? And also, what future directions would you like to see tech comm teachers-scholars take up when it comes to disability studies?*

LC: Disability studies is for me something that is both personal, it is through doing work with disability studies and reading scholarship that I came to self-identify as disabled, so I have clinical diagnoses of major depressive disorder and anxiety. Although, as I recently discussed with my therapist, I was like, "I feel like the depression cured the anxiety, because they're sort of competing impulses, and the depression won." I might lose that diagnosis at some point. But again, it's not the driving sort of topical force necessarily for either my research or my teaching in the way that it is for a lot of my colleagues in the field. I'm thinking of Christina Cedillo and Margaret Price and Stephanie Kerschbaum, who just won a mentoring award. Congrats,

Stephanie. Jay Dolmage was hugely influential on my early interest in work. And of course my colleague who I co-wrote that piece with in graduate school, “Ellie,” Ella R. Browning.

Those folks are really focused on theorizing disability and rhetorics of disability in a way that I take up and use, but I'm not necessarily contributing to that center. So it is a big challenge to be like, “Oh, do I get to say something about where we are as a disability studies field?” And the other thing that this question makes me reflect on is, Ellie and I wrote that piece in graduate school, and it was based on an assignment that we had co-developed for technical writing courses, the idea being that to do disability studies pedagogy does not require you to be teaching a “disability studies class,” that you can incorporate critical disability and critical accessibility into any technical communication classroom.

In some ways, tech comm is such a chameleonic discipline, not just as a sort of research, but as a practice, and so it really lends itself. This case study approach that we talked about was something where it was like, here's a case study we developed, but you could develop case studies for all kinds of fields. Ours was about emergency evacuation procedures in New York, but if you're teaching health sciences students, you could have them work on a case study associated with critical accessibility issues in hospitals, for example, the idea being, as you said, that the field can center this work more. But we were graduate students. This was a project that we had co-developed in a practicum course, because at USF we had the opportunity to teach a number of tech comm courses, but we had to take a practicum.

And so I don't know if changes that I've observed in the field since then are because the field has changed or because I've grown as a scholar and gotten to know the field. I think that's a constant challenge for academics, is to find that balance between making claims about the field versus understanding yourself. It reminds me of the thing that happens on Twitter all the time, where people are like, “Nobody's talking about X,” and it's like, you're just not following the right people. Lots of people are talking about “X.” So lots of people have been working on disability.

The place that I think I would love to see the field go, and when I say the field, I don't mean disability studies, I mean rhetoric and tech comm, to think more about accessibility as an everyday practice and as a practice of equity, and not just equity for the people who benefit from the accessibility, but equity for the people who are tasked with the labor of creating accessibility.

In the context of the pandemic, this has become incredibly relevant, where suddenly last March, pretty much every higher education instructor in the US and many other countries was like, “Oh, okay, online, I guess, is what we're doing.” A lot of instructors, particularly those who didn't have experience teaching online before, sort of picked up the face-to-face modality and just did the closest translation they could into an online course. That meant requiring students to come to Zoom sessions, maybe recording them, maybe posting them for students who couldn't come, or recording lectures.

But the thing about recording video and tasking students with watching them is, that video needs to be captioned. That's just a bare minimum for accessibility. That's not just for students with hearing impairments, although primarily, it's an access issue for lots of other reasons beside bodily impairment. It's for students who only have time to watch it when they're on the bus going

somewhere, or they're at the laundromat and they forgot their headphones, or they need to be pausing every five seconds, and it's a lot easier to keep your place in the video if you have the captions available to check where you are. And that's not to say this is instructors' fault for deciding to switch to a video modality. We've all been doing the best we can over the last three semesters and coming into a fourth pandemic teaching semester.

Nor is it their fault for not taking the time to caption, because I think it's fair to say that many of my colleagues have no training. They don't know what the tools are available. They don't know best practices for captioning, let alone writing alt text for images if they're uploading a lot of images, let alone making sure that your scanned documents are run through some kind of optical character recognition program so that the text is readable by a screen reader. This is an area of specialization. There are literally people who do this for a living, making things accessible.

So when the pandemic happened and suddenly instructors had this additional burden placed upon them, first of all, many people didn't know that they had this burden, because it just wasn't on their radar. Second of all, they didn't have training or support to do it. I would love to see the field of rhetoric and technical communication really take up these questions seriously. I don't know what the answers are. I don't think the answer is to task instructors with doing yet another thing, I think this is an institutional problem, and institutions need to be providing resources and support.

But that doesn't mean that the Center for Teaching puts a "how-to" guide online. That's not sufficient. So we have the theoretical basis, and we also have the people in the field who've really thought through best practices for accessibility and universal design for learning, both within our field and then disability studies writ large. And now the big challenge facing us is like, okay, how do we use this to make change on our campuses?

*SW: Thanks, Cagle. And thank you Pedagogue listeners and followers. Until next time.*